

FIG. 1

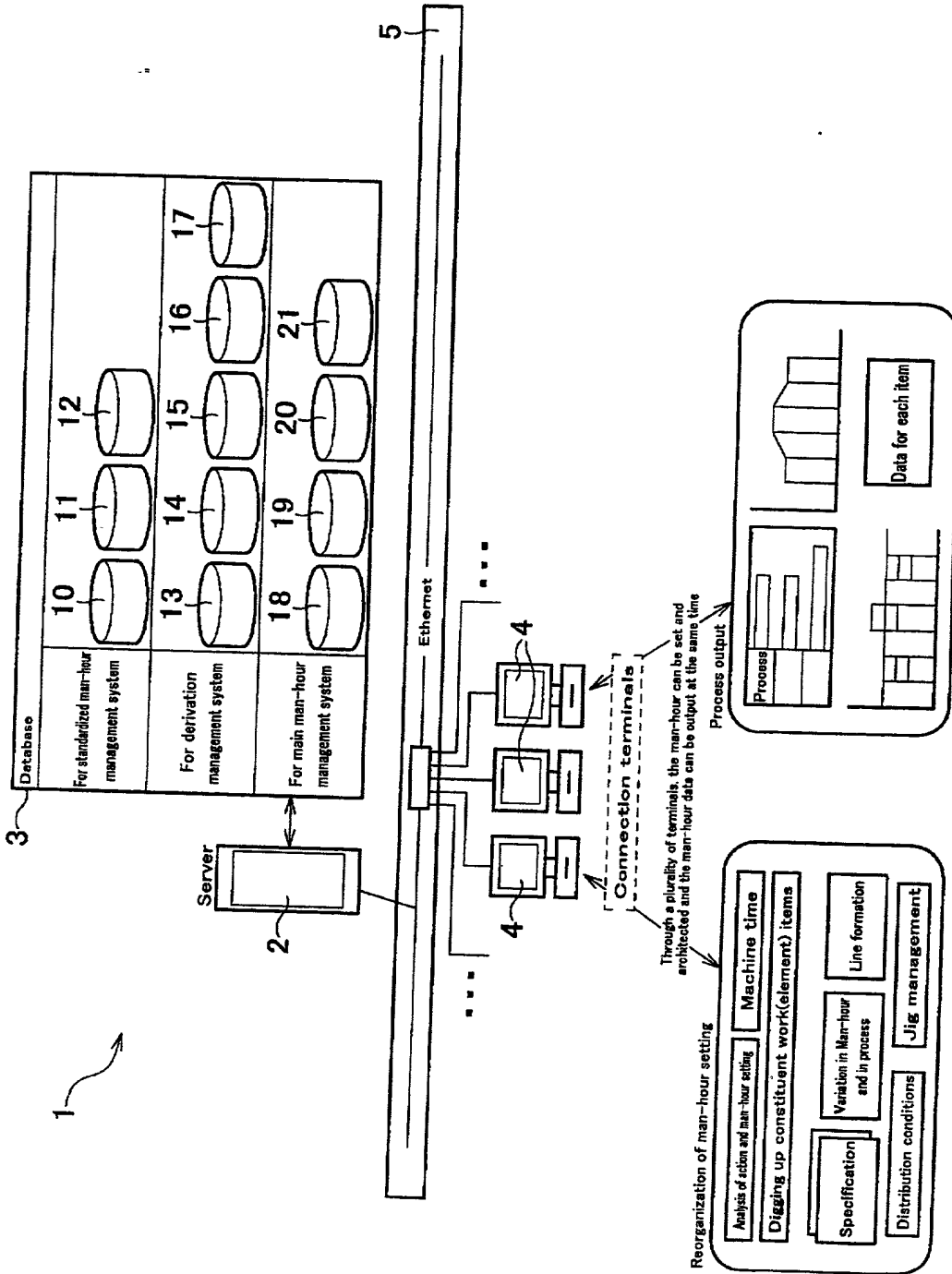


FIG. 2

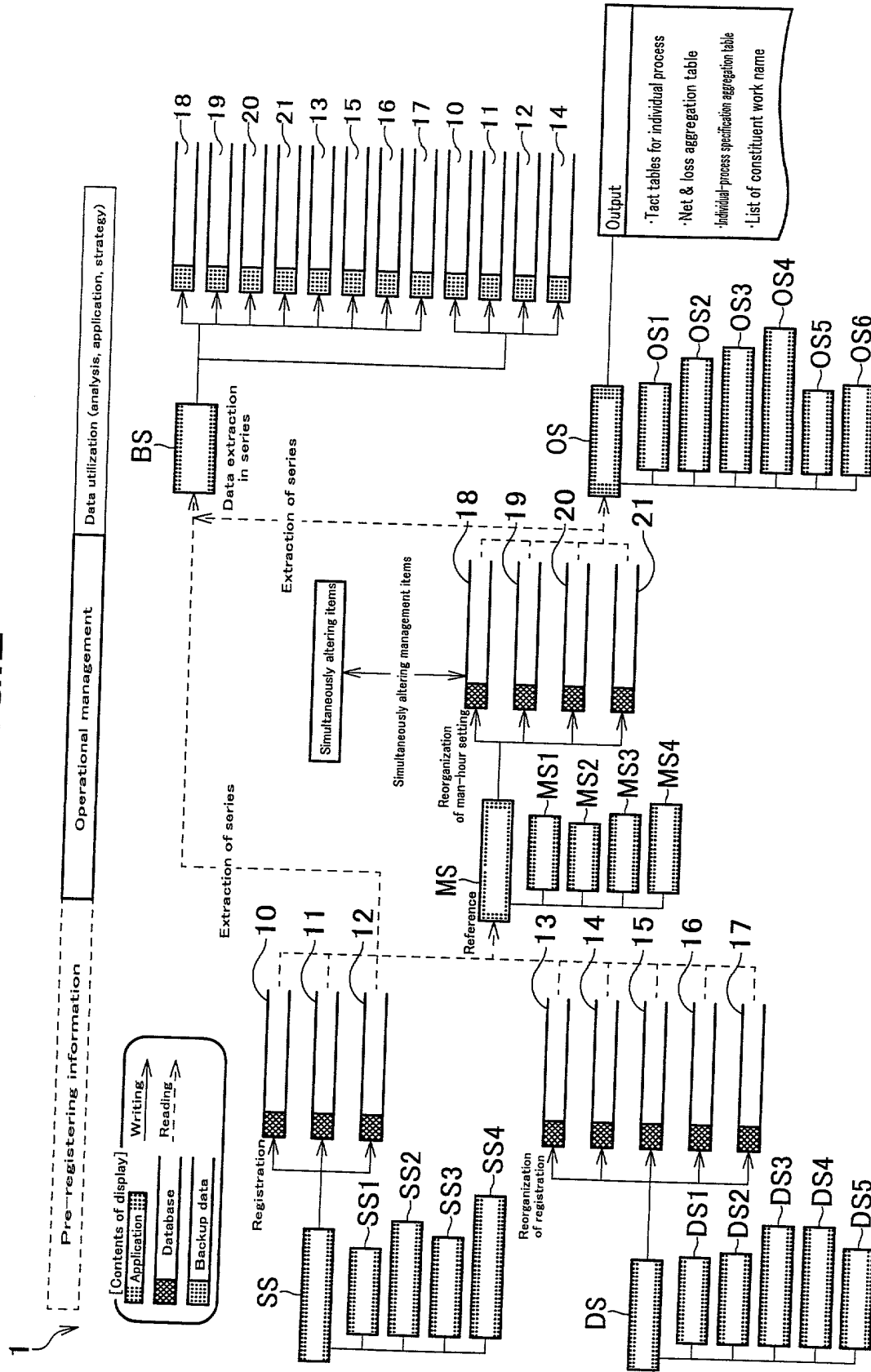


FIG.3

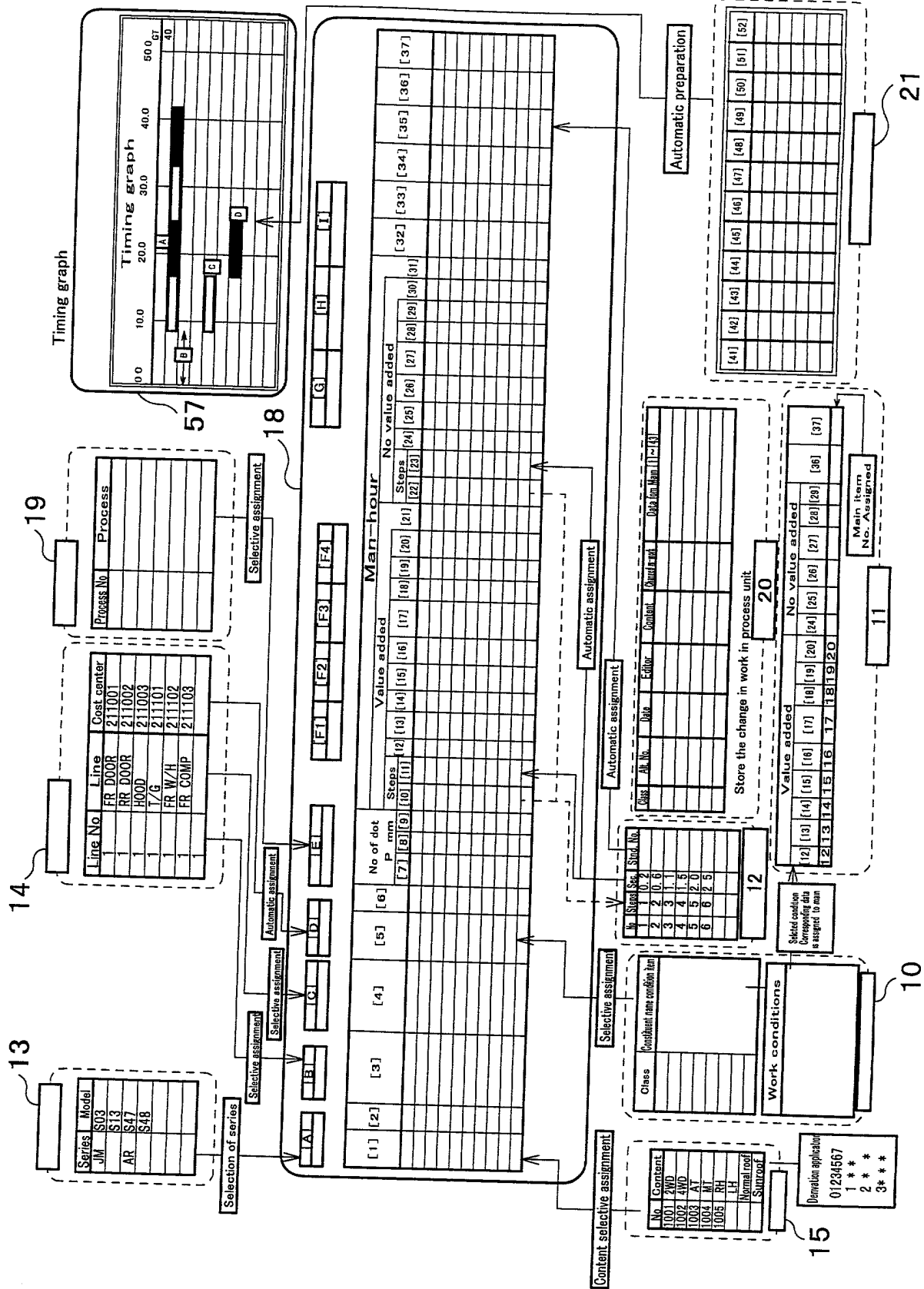


FIG. 4

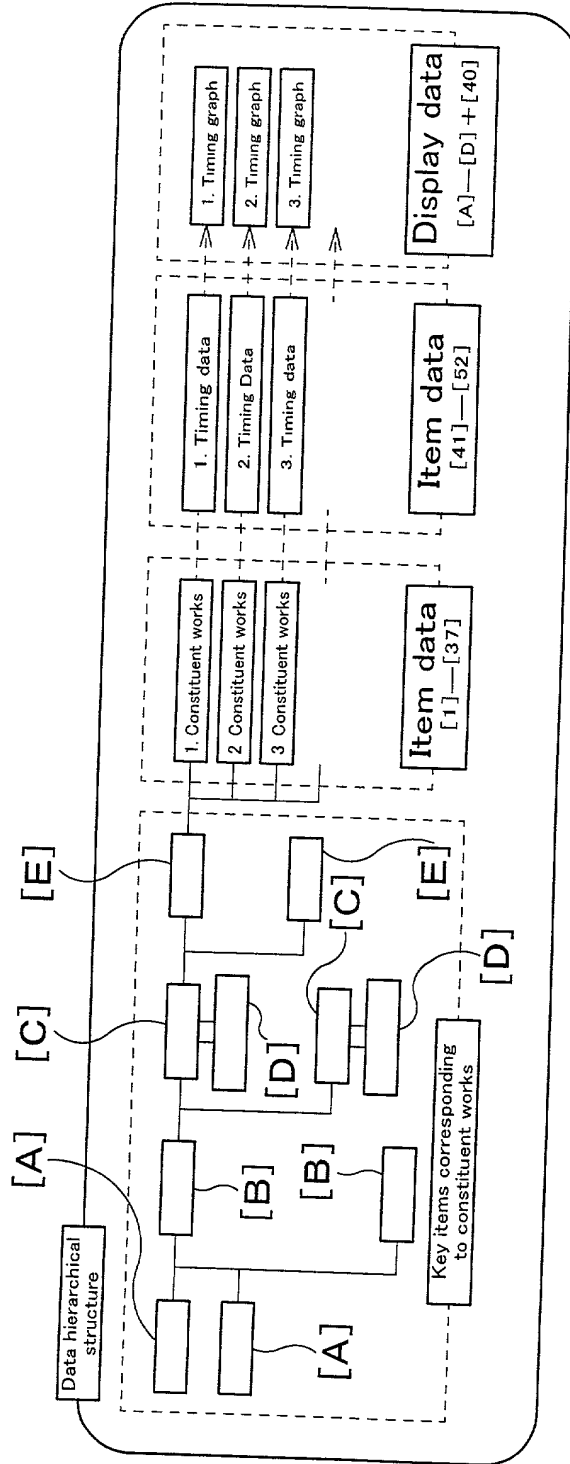


FIG. 5

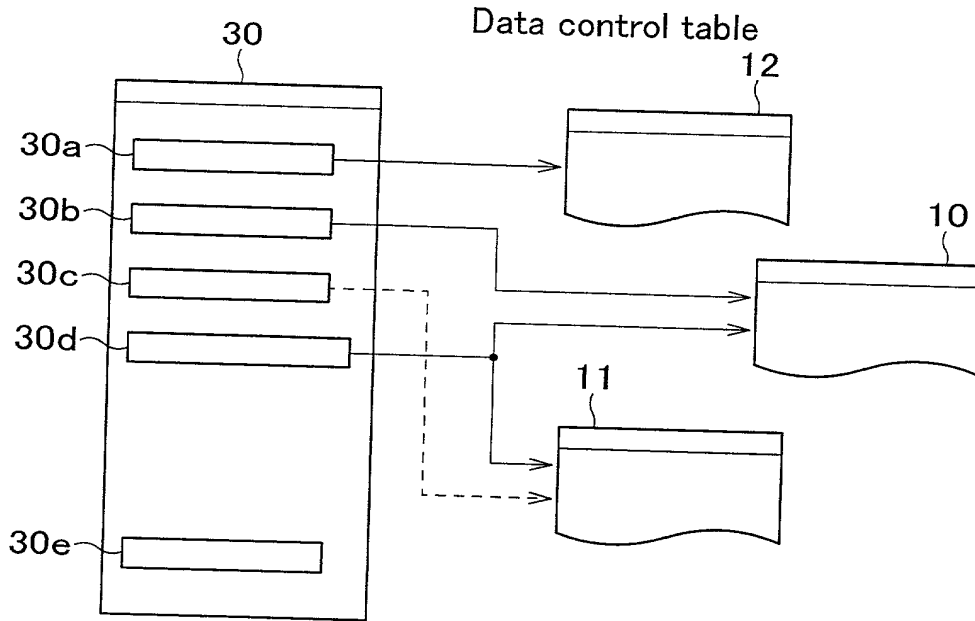


FIG. 6

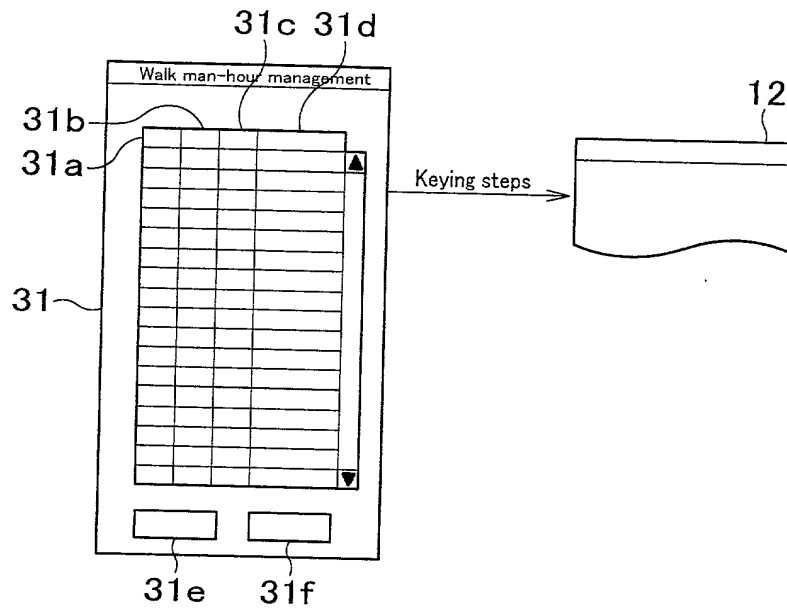


FIG. 7A

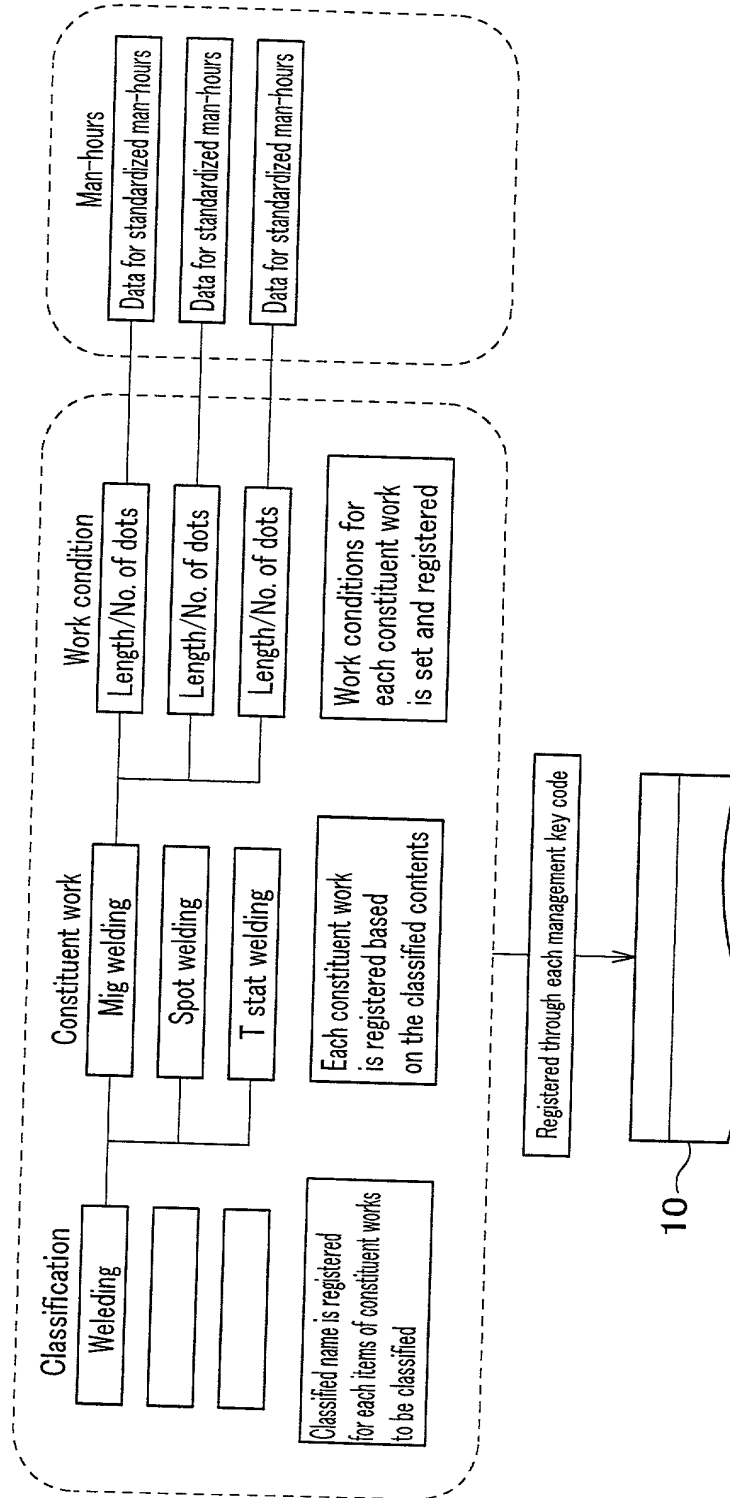


FIG. 7B

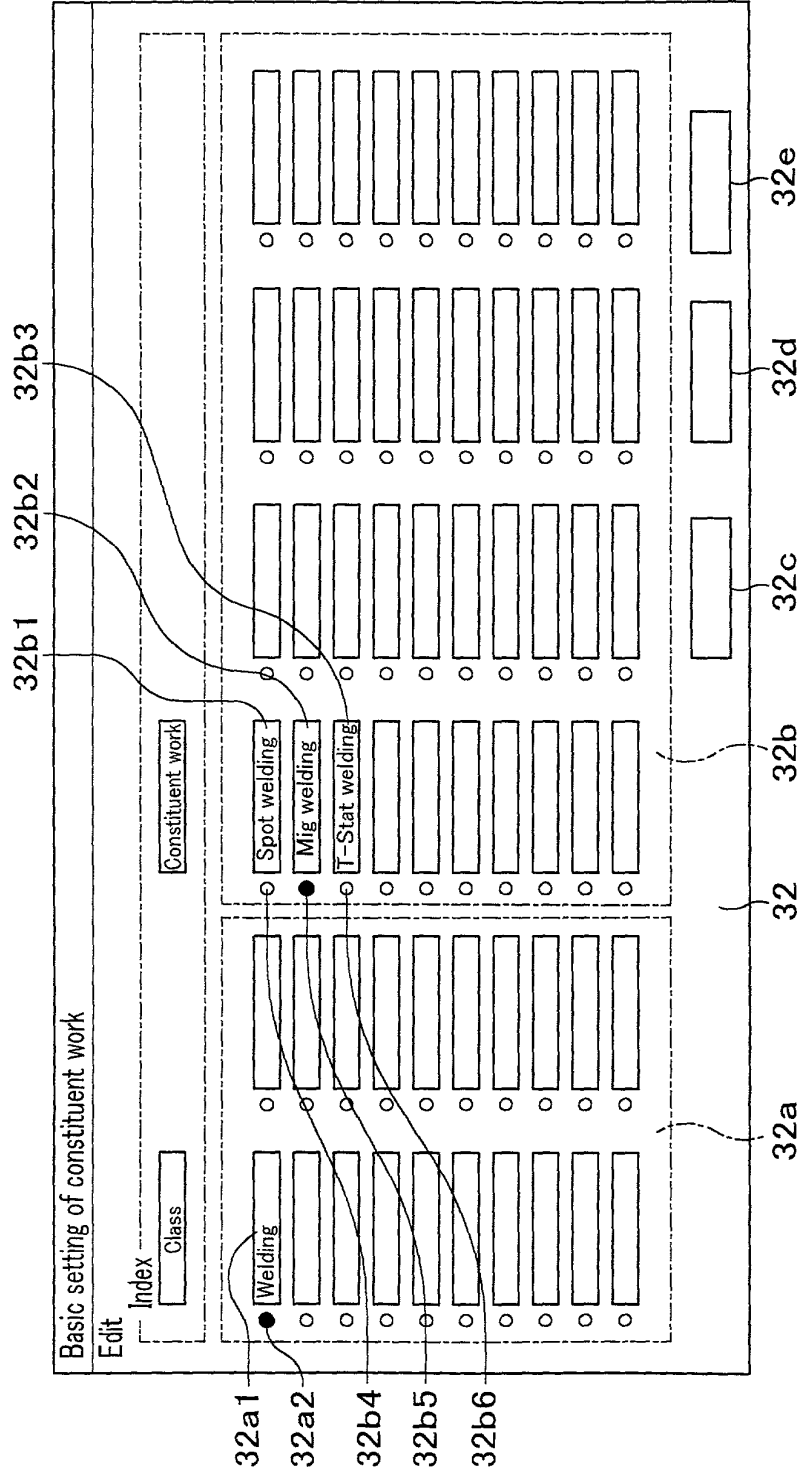
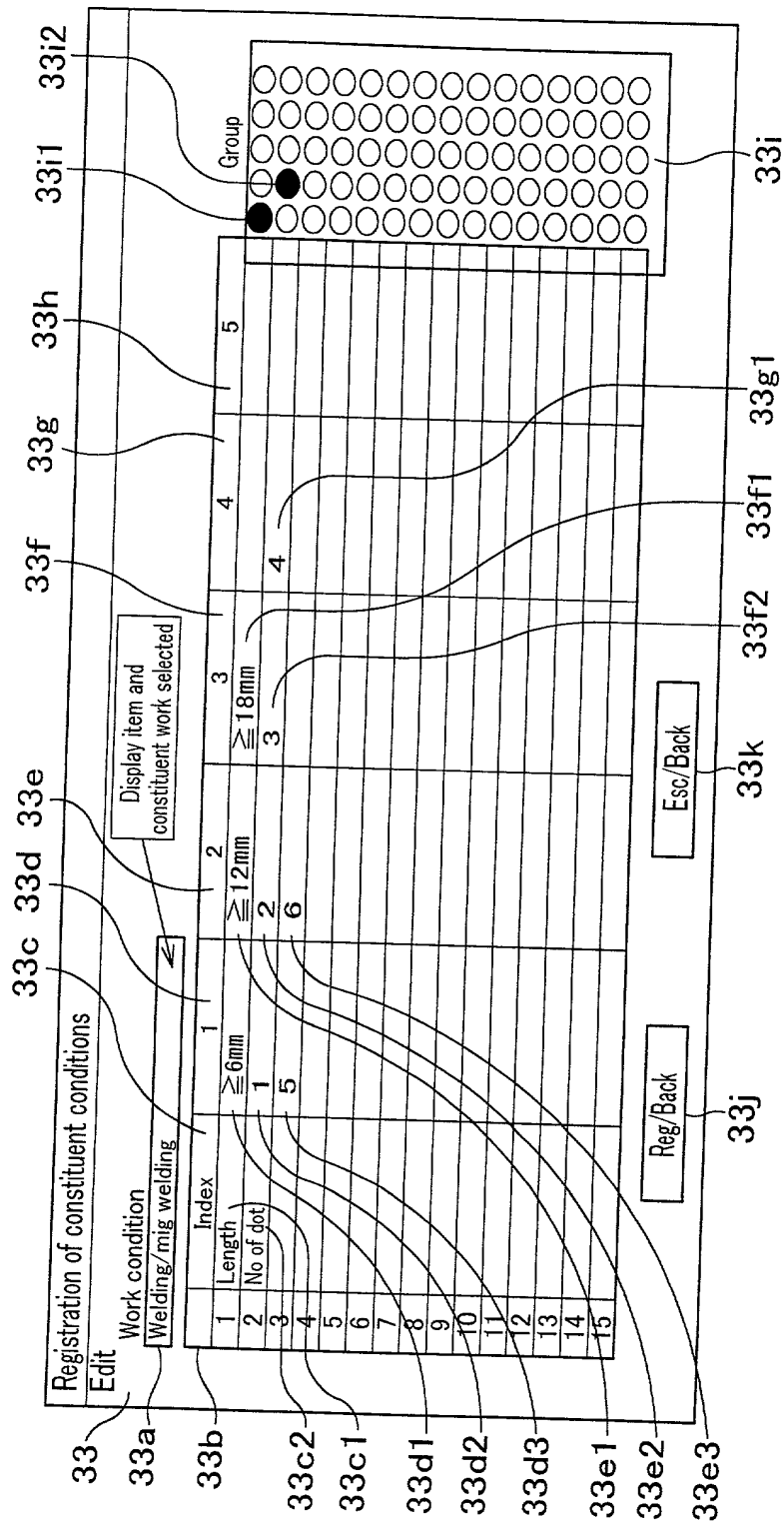


FIG. 7C



81

10

FIG.9A

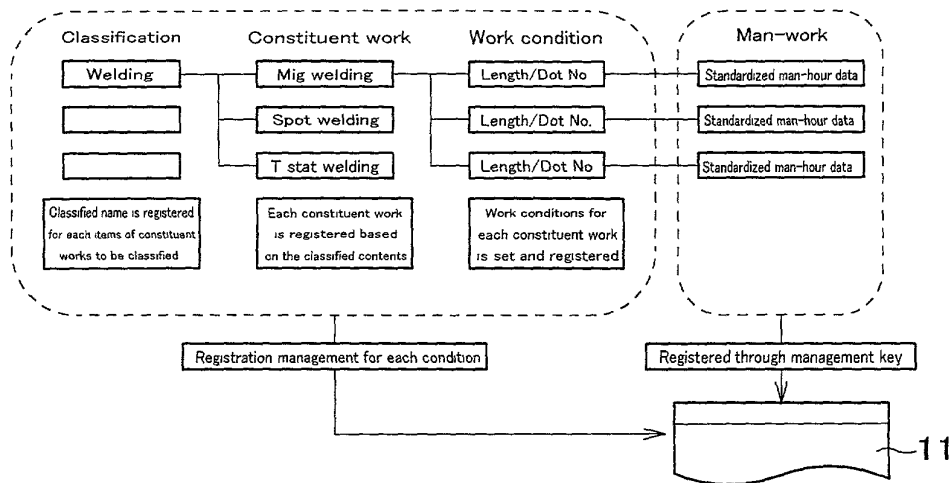


FIG.9B

34d1 34 34d 34e2 34e1 34i 34e

Select item condition of registering stand. man-work

34a Edit

34c1

34c

Standardized Man-work Registration

Class.

Welding

Fastening

Adhering

Fitting

Constituent work

Spot welding

Mig welding

T stat welding

Setting work cond.

Length

Dot No.

Display tot. m-work

Display end line of group

Standardized man-work

Remarks

34b18

34b2 34b4 34b6 34b8 34b10 34b12 34b14 34b16

34b1 34b3 34b5 34b7 34b9 34b11 34b13 34b15 34b17

Input standardized man-work data

34f

34g

34h

34b

[12] [13] [14] [15] [16] [17] [18] [19] [20] [24] [25] [26] [27] [28] [29] [36] [37]

FIG. 10A

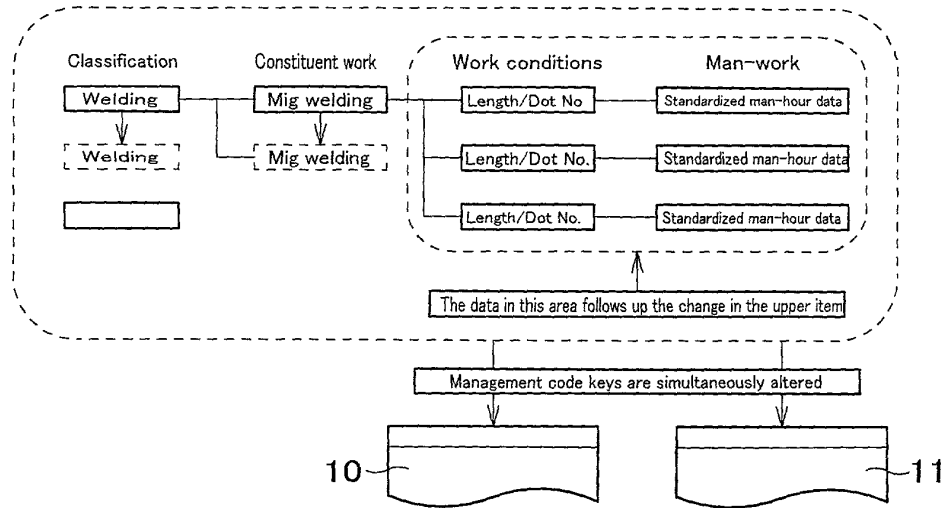


FIG. 10B

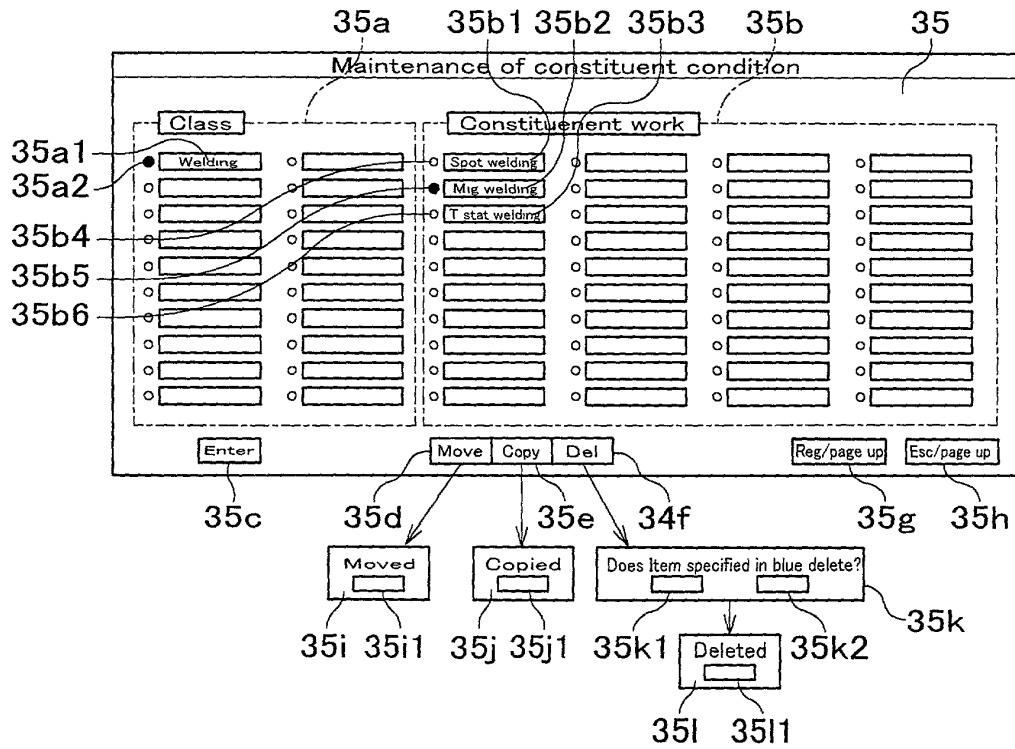


FIG. 11

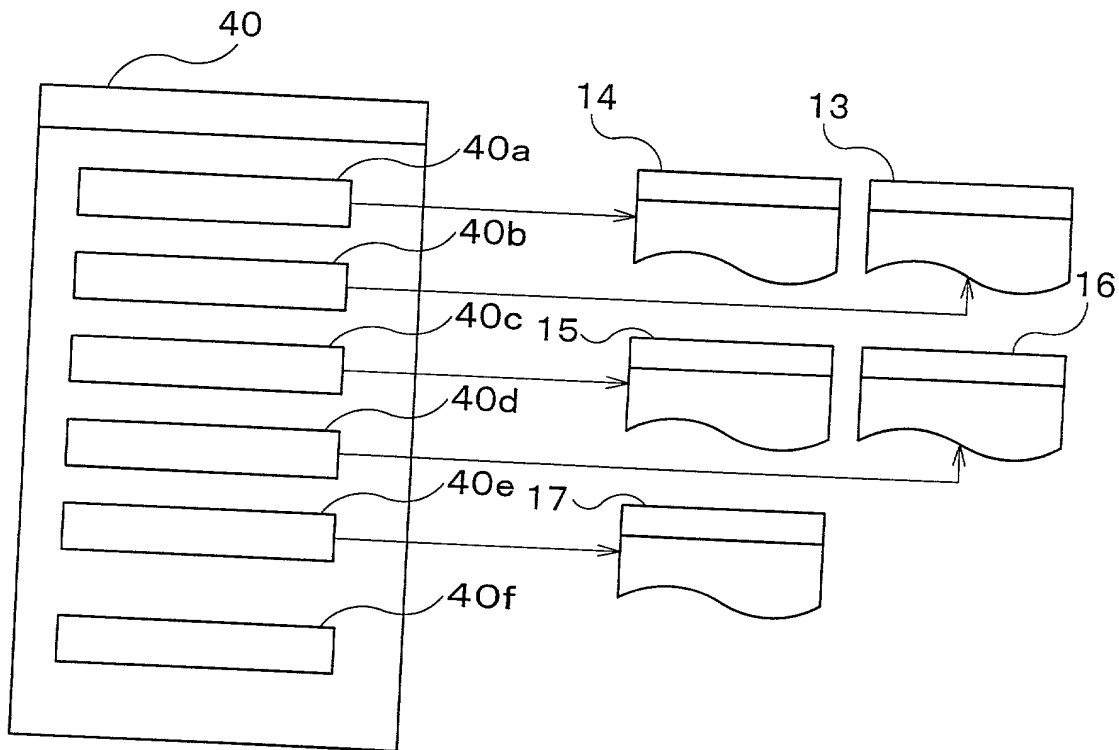


FIG. 12A

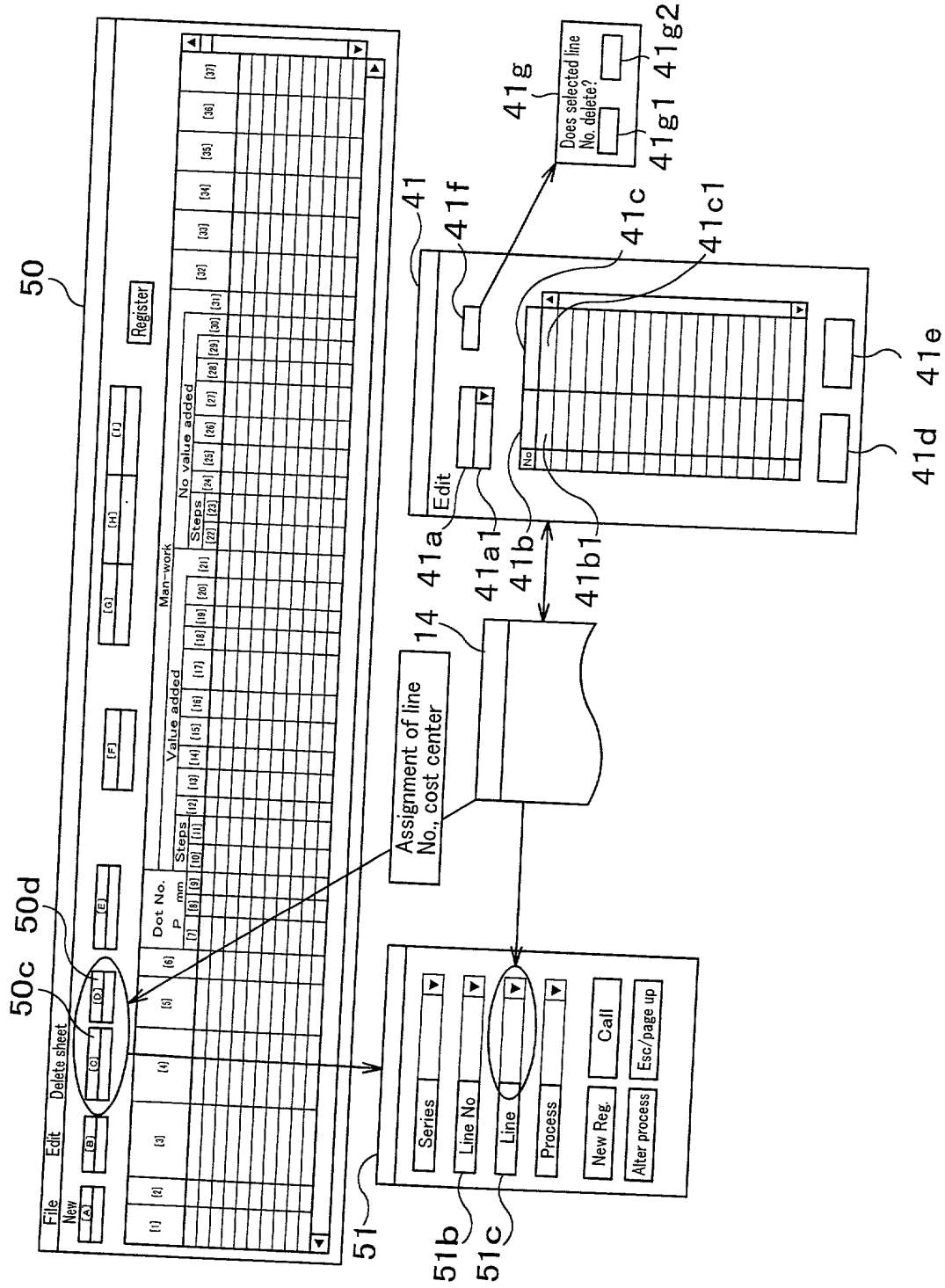


FIG. 12B

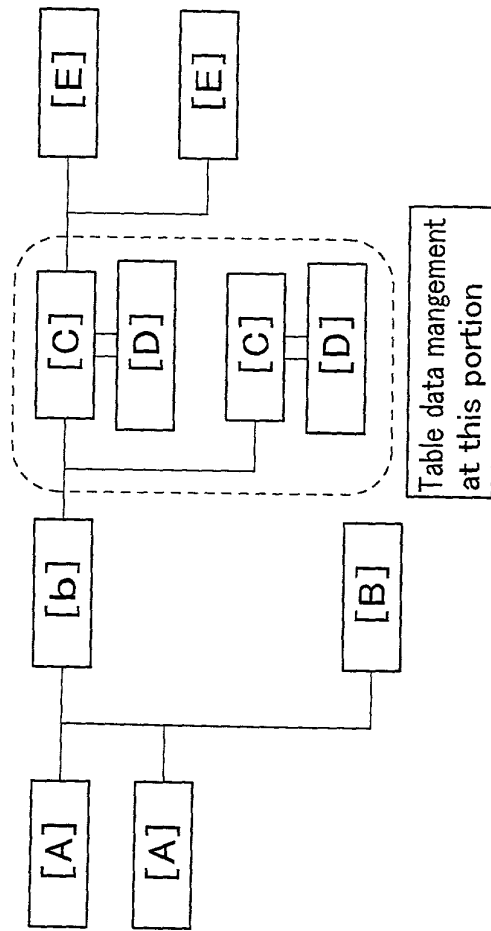


FIG. 13

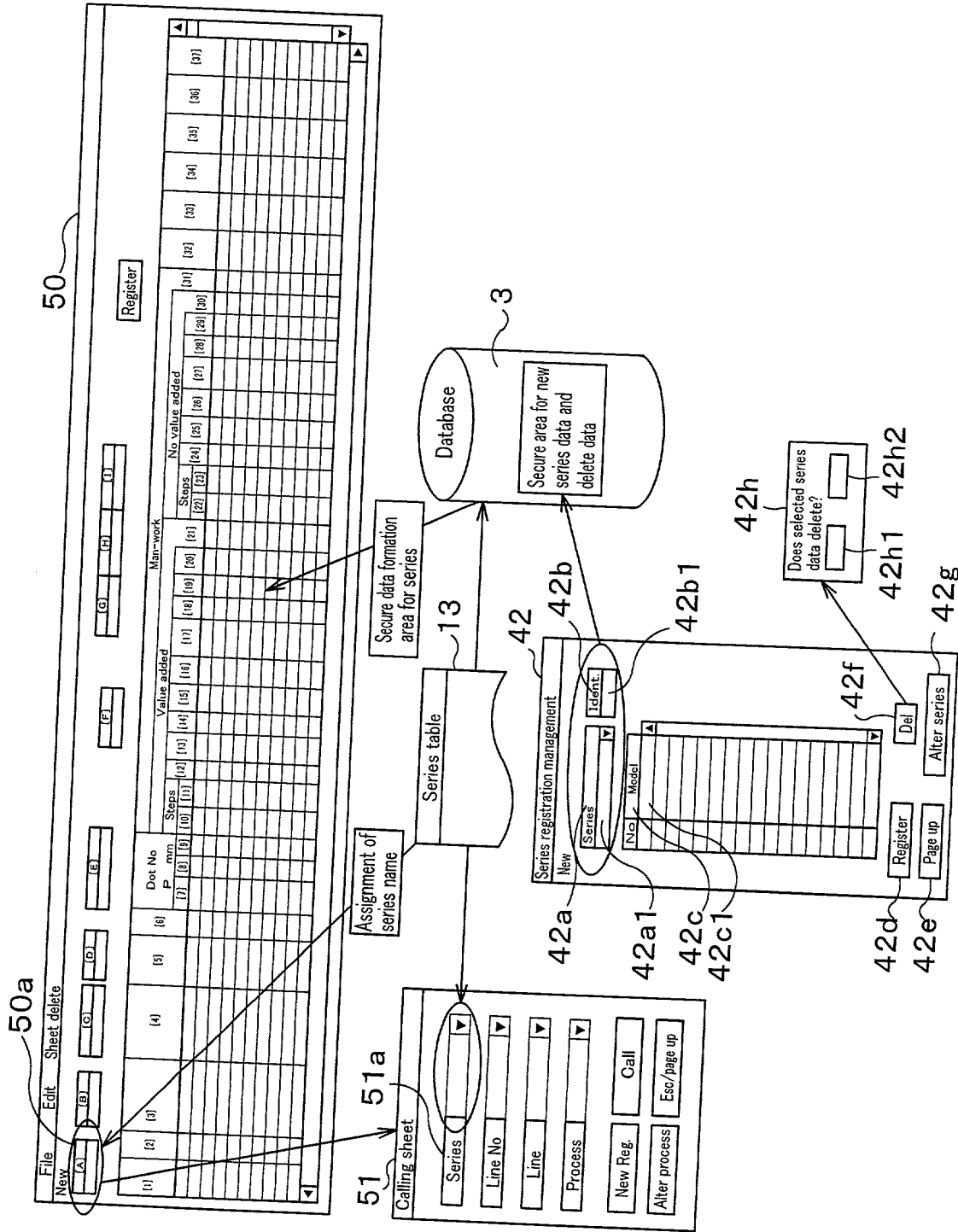


FIG. 14

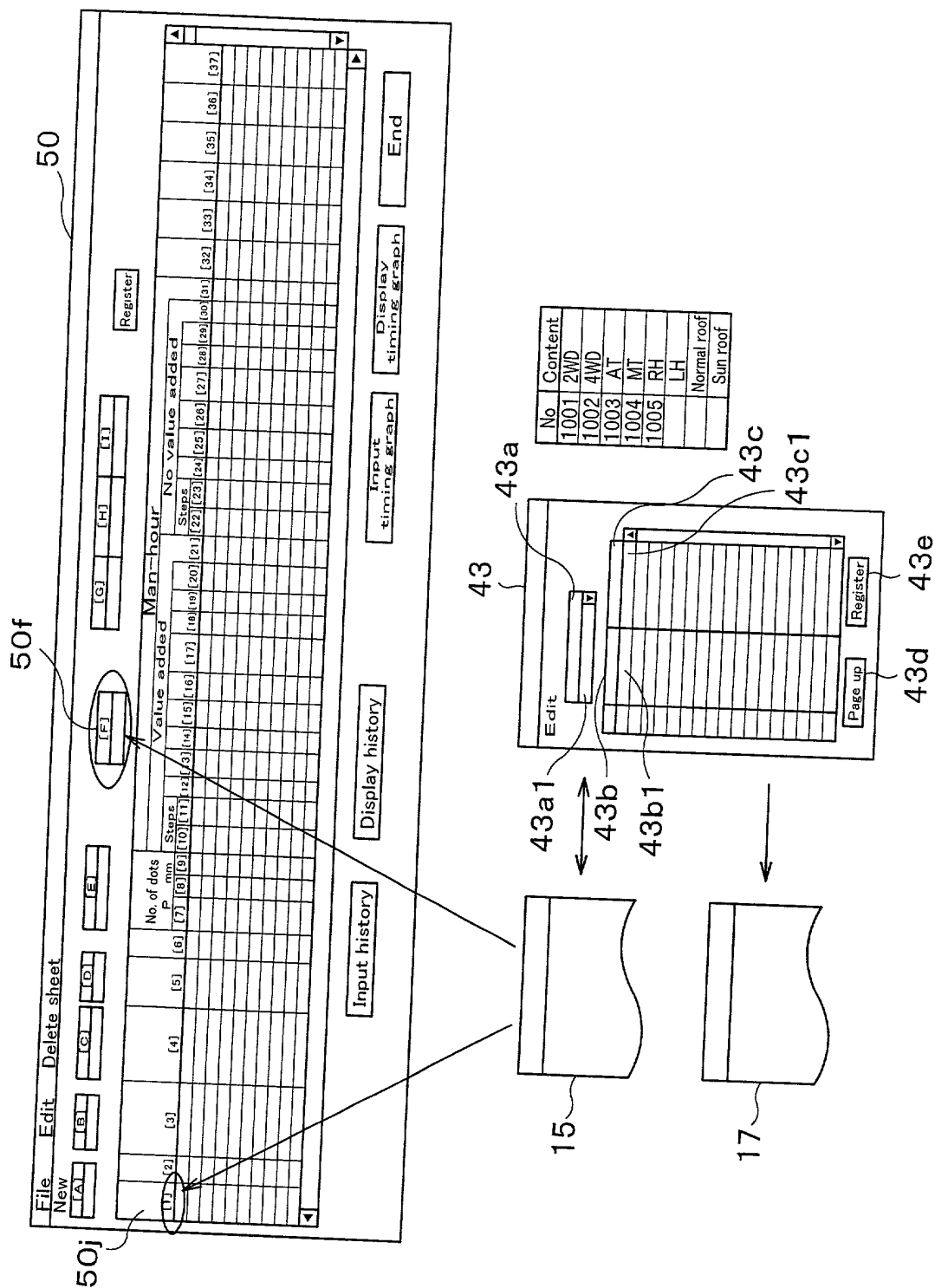
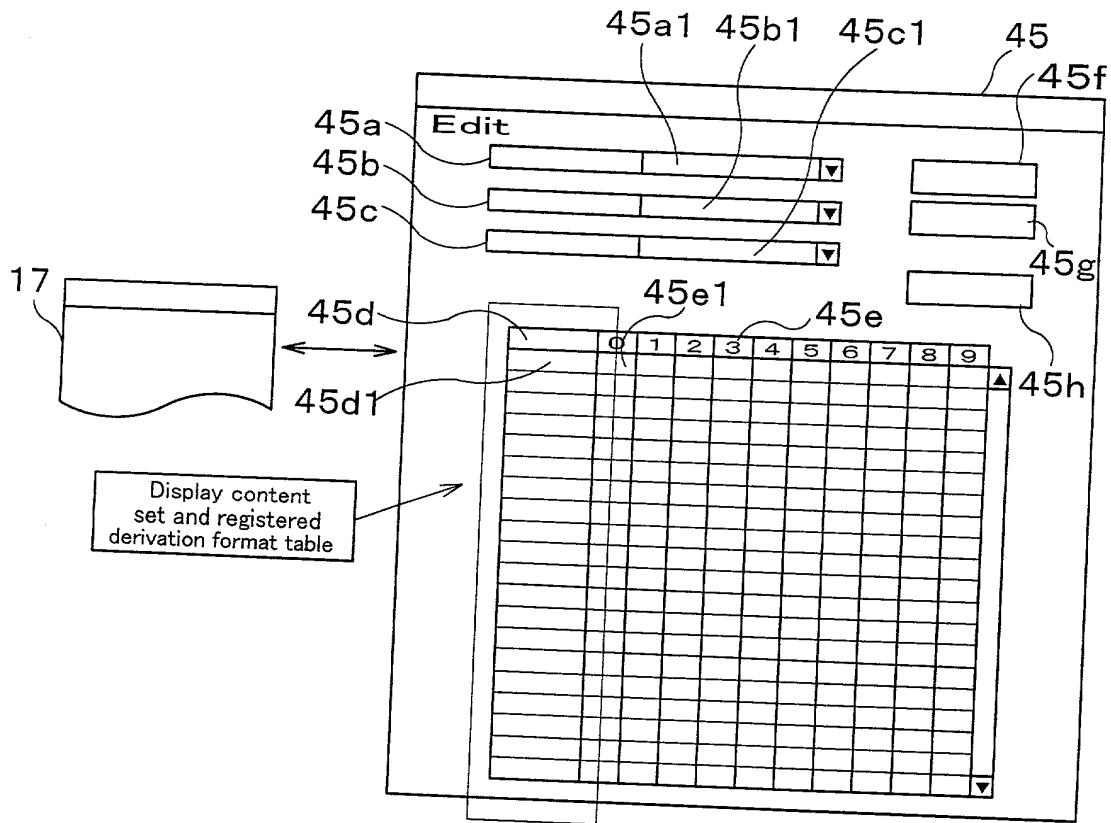


FIG. 16



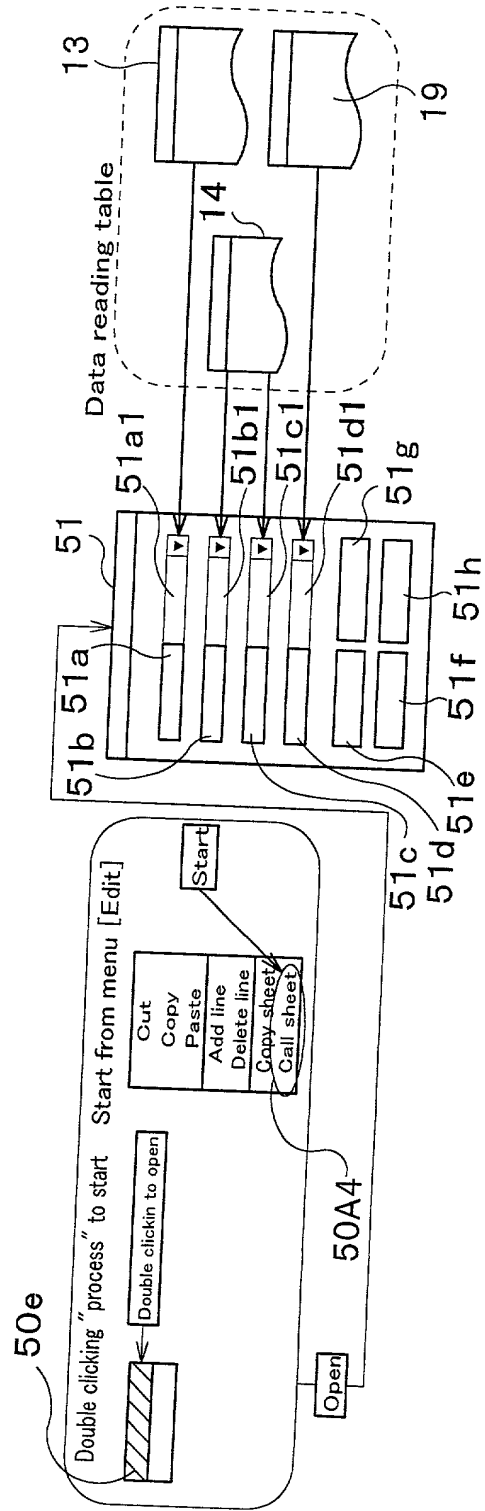
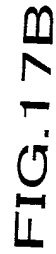


FIG. 18A

Figure 1 is a schematic diagram of a computer system 50. The system includes a File menu, Edit menu, and Delete sheet button. Below these are input fields for [A], [B], [C], [D], [E], [F], [G], [H], [I], and a Register button. A large grid is labeled "Man-hour" and is divided into three sections: "Value added" (Steps 1-16), "No value added" (Steps 17-26), and "No value added" (Steps 27-36). The grid has columns for "No of dots" (P mm) and "Steps" (1-36). The grid is labeled with "50j", "50k", and "50j1". To the right of the grid are buttons for "Input history", "Display history", "Input timing graph", "Display timing graph", and "End". The entire system is labeled "50".

FIG.18B

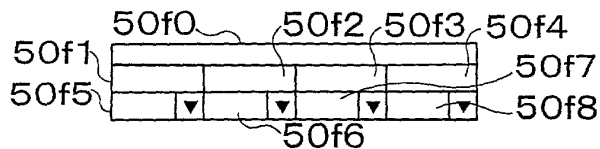


FIG.18C

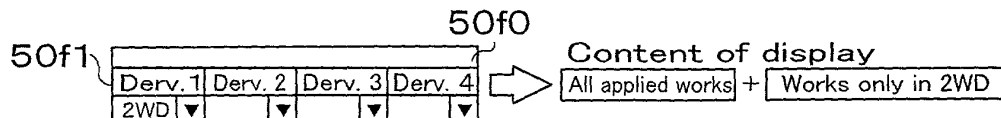


FIG.18D

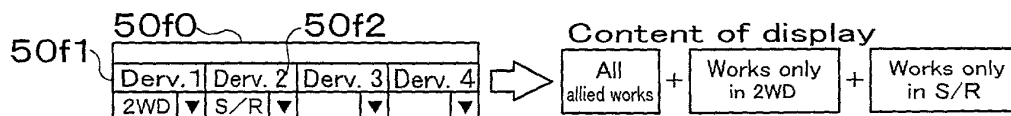


FIG.18E

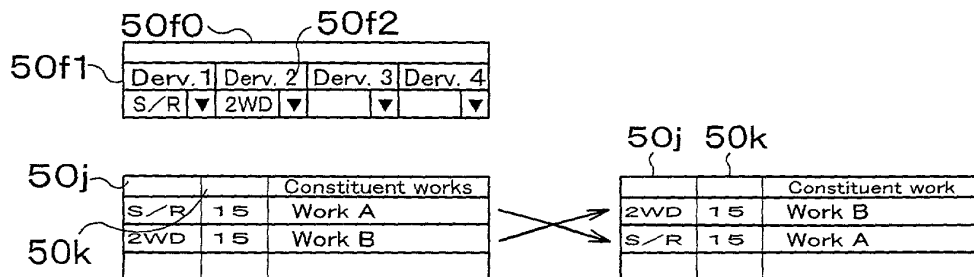
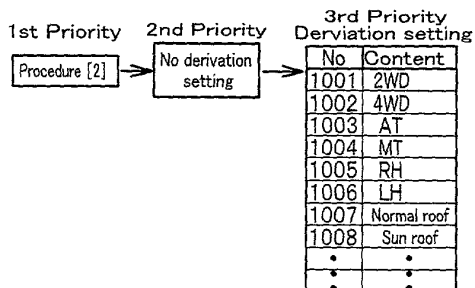


FIG.18F



No	Content
1001	2WD
1002	4WD
1003	AT
1004	MT
1005	RH
	LH
	Normal roof
	Sun roof

FIG. 20

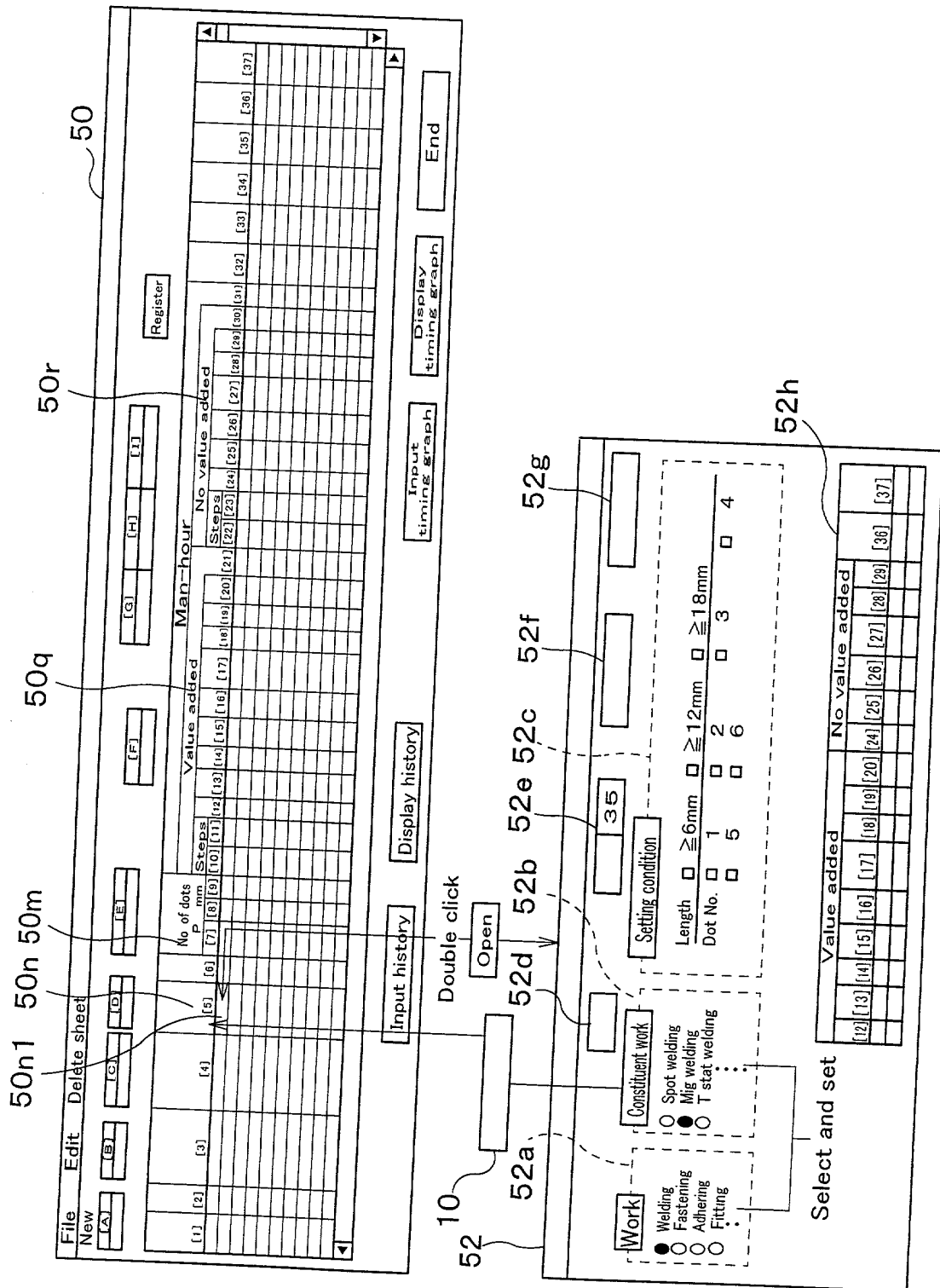


FIG. 21

File Edit Delete sheet

New

[A] [B] [C] [D] [E] [F] [G] [H] [I]

Register

50r

50

Value added

Steps

Dot No.

Man-hour

No value added

Steps

Input history

Display history

Input timing graph

Display timing graph

End

21b 21d 21f 21h 21j

21

ST Wait 1 Ope. 1 Wait 2 Ope. 2 Wait 3 Ope. 3 Wait 4 Ope. 4 Wait 5 Ope. 5 Total

2,5 1,1 2,2

Write the total of wait [1] ~ [5] of main man-work management as a line unit
 *write at storage of timing data in man works

Processing main data
 Subtotal [30] + [31] is re-calculated
 and is required to be written on DB

FIG. 22

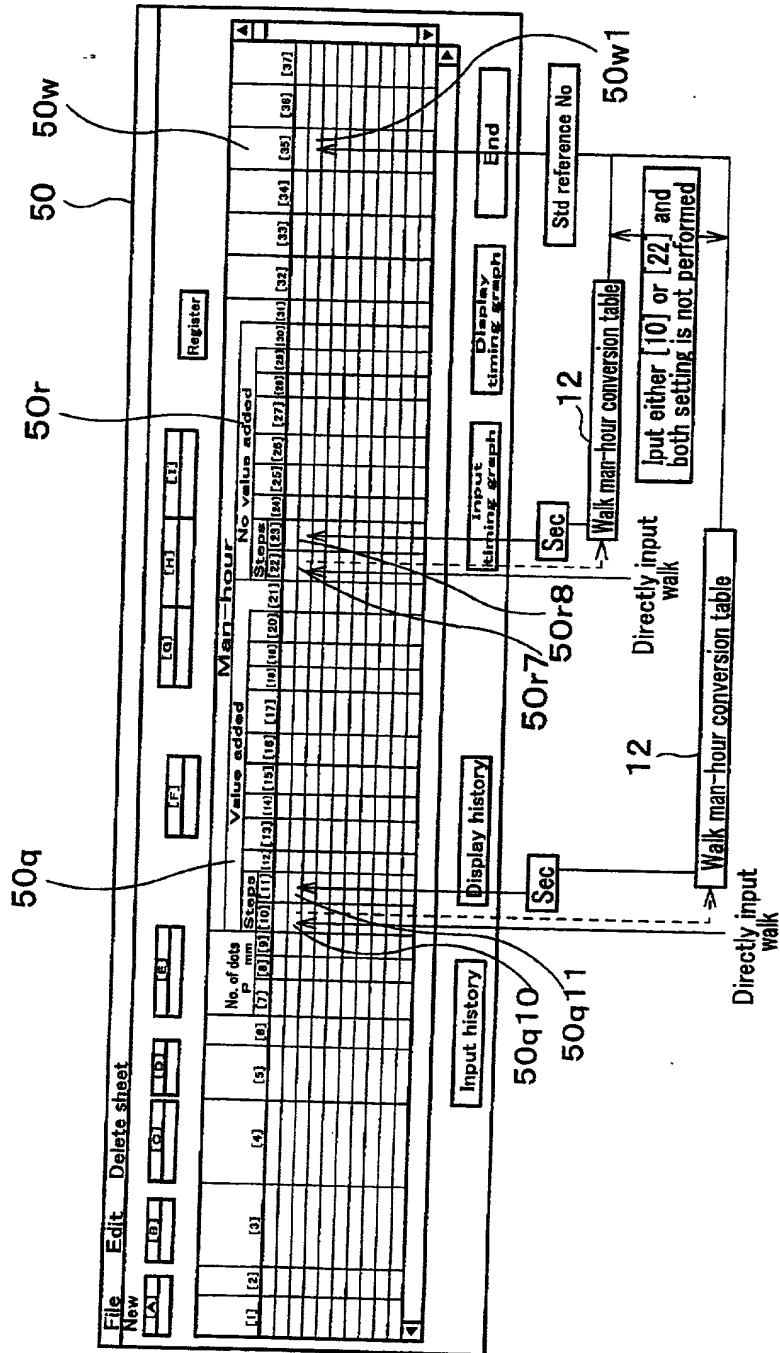


FIG. 23

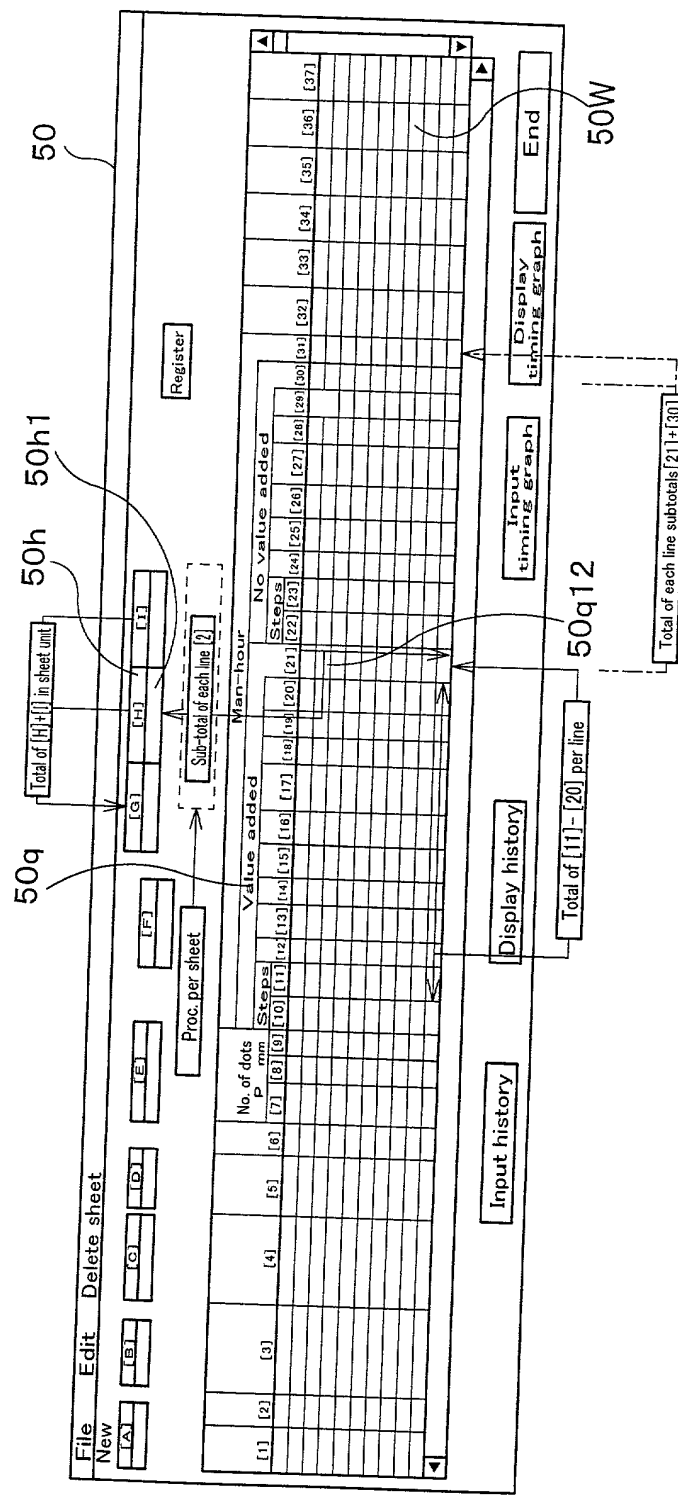


FIG. 24

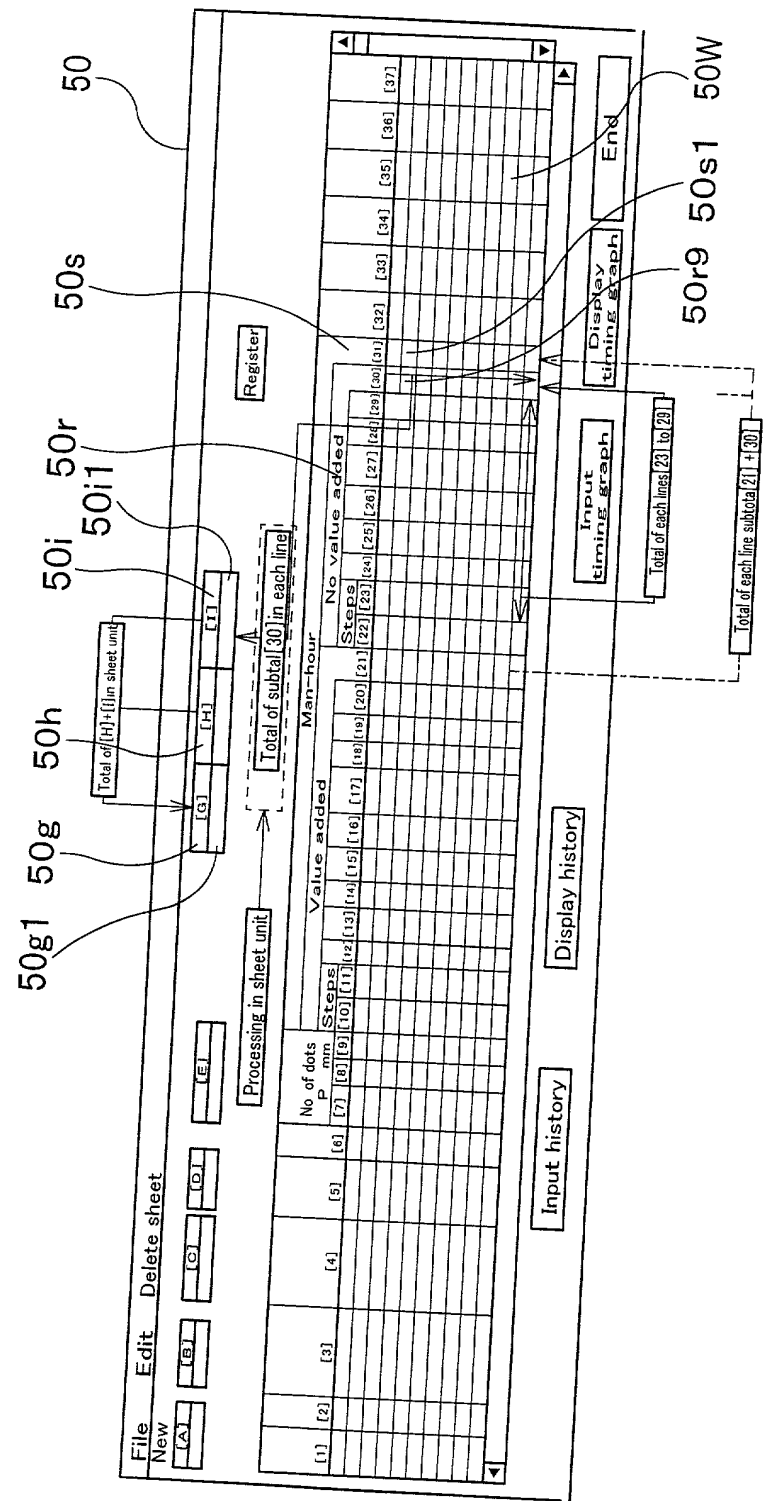


FIG. 25

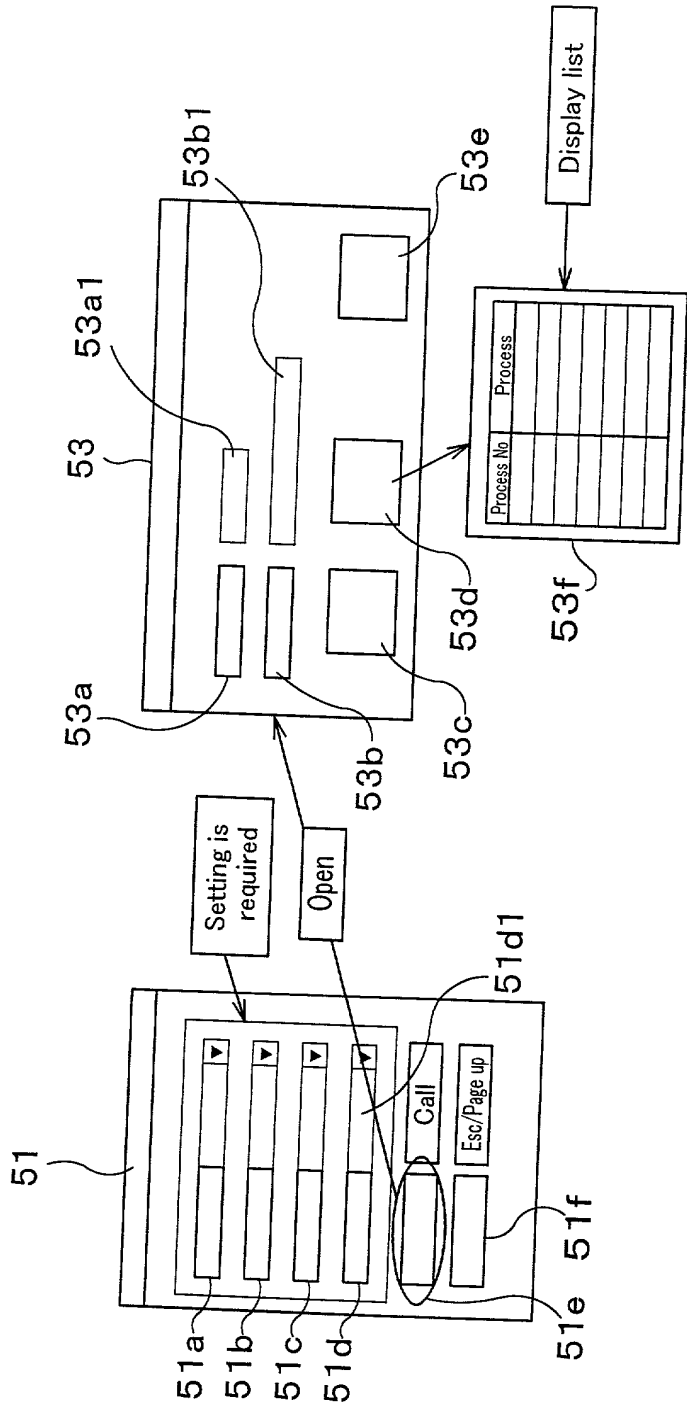


FIG. 26

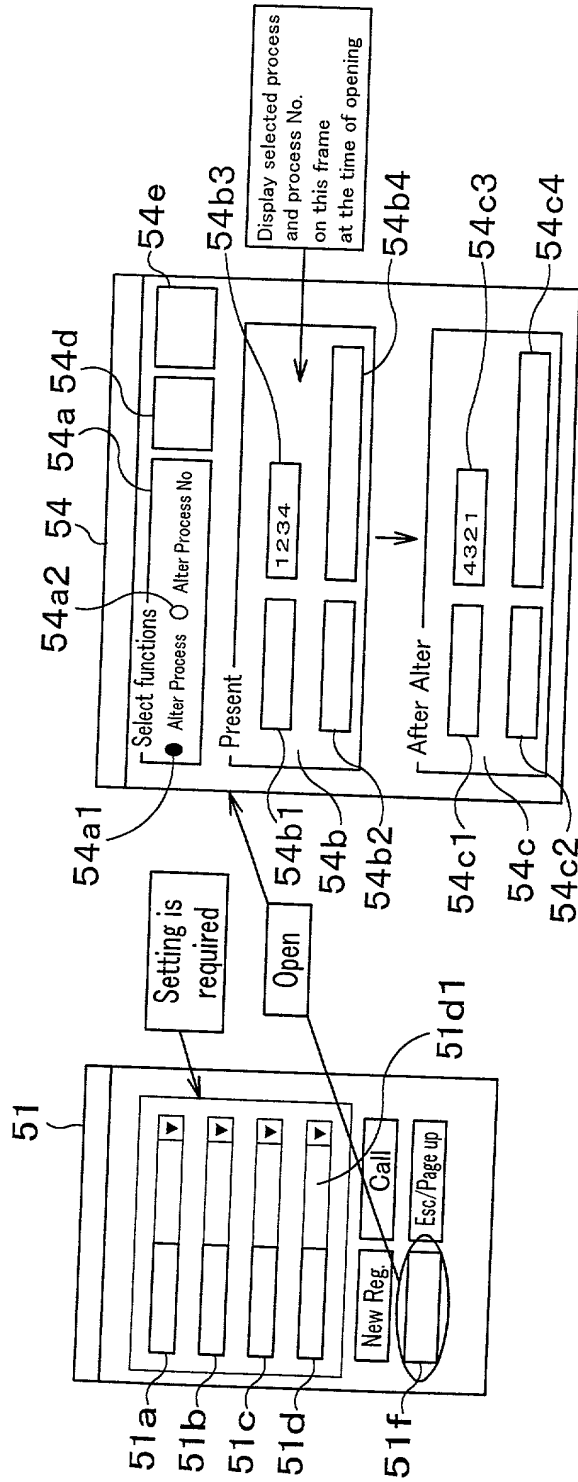


FIG. 27

50

File Edit Delete sheet

New (A) (B) (C) (D) (E)

Register

(1) (2) (3) (4) (5) (6)

Dot No P mm (7) (8) (9)

Value added Steps (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37)

Man-hour No value added Steps (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)

50B Input history 50C Display history 50D Input timing graph 50E Display timing graph 50F End

55a 55b 55c 55d 55e 55f 55g 55h 55i

Items are automatically assigned

55a1 55b1 55c1 55d1 55e1 55f1 55g1 55h1 55i1

Edit

No

Direct input

FIG. 28

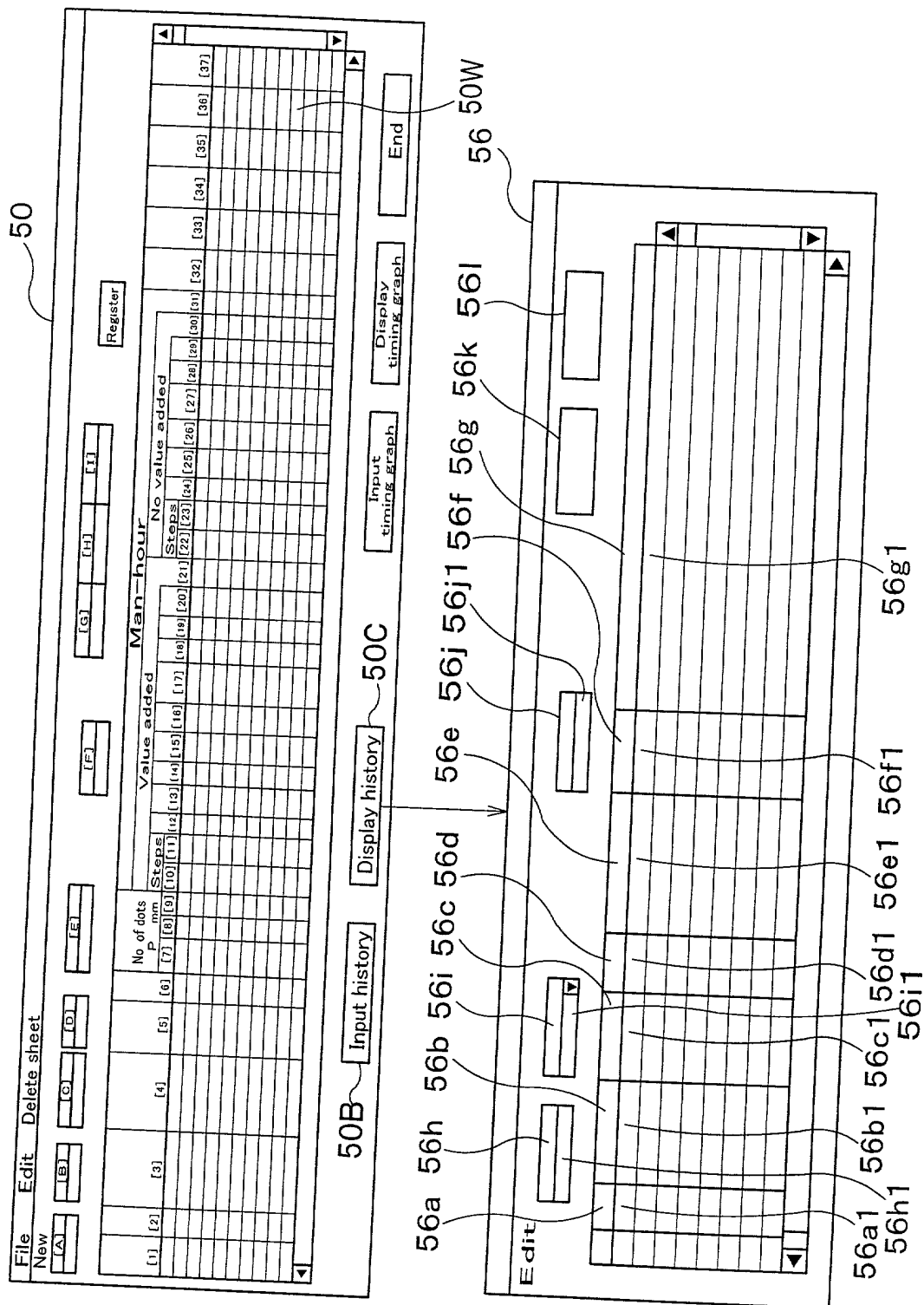


FIG. 29A

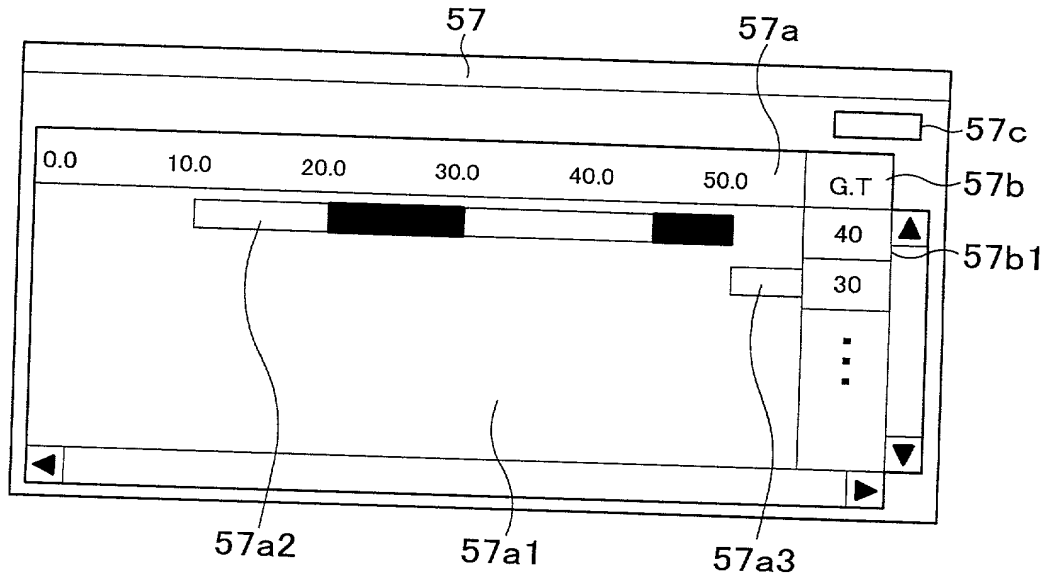


FIG. 29B

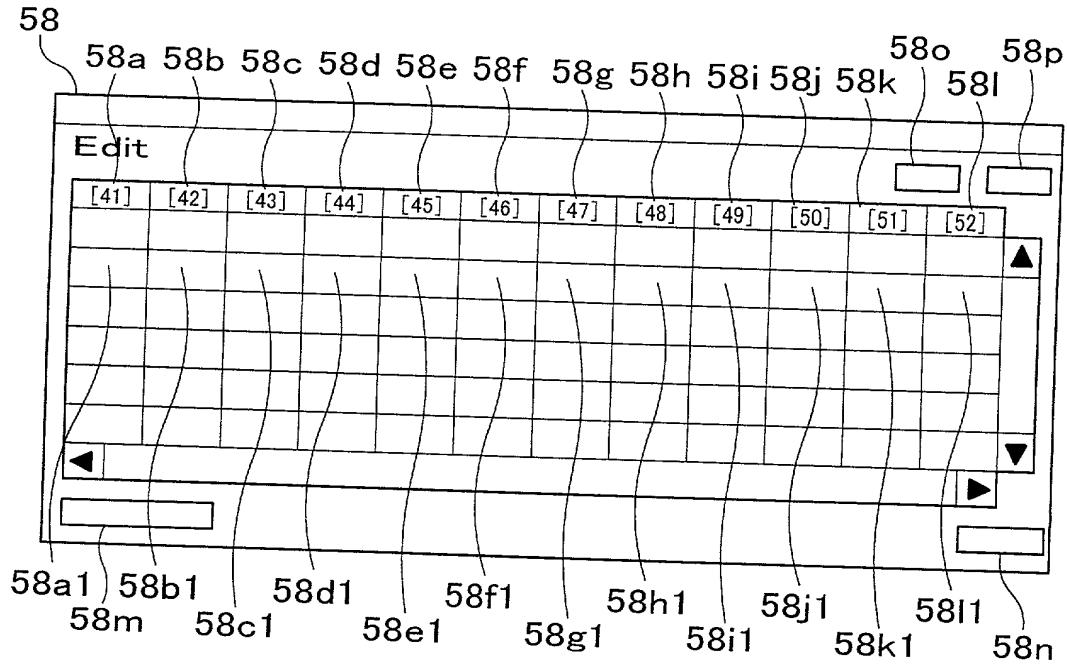


FIG. 30

Figure 5 is a schematic diagram of a data entry and processing system. The main window 50 is divided into several sections. At the top, there are buttons for "File", "Edit", and "Delete sheet". Below these are input fields for "New" and "Register". The central area is a large grid for data entry, with columns labeled "Man-hour" and "No of dots". The grid is divided into sections for "Value added" and "Steps". To the right of the grid are buttons for "Input history", "Display history", "Input timing graph", and "End". Below the grid is a section for "Edit" with buttons for "50G", "50D", "58", "58k", and "50W". The bottom section contains a table with columns for "S.T", "Wait 1", "Wait 2", "Wait 3", "Wait 4", "Wait 5", and "Total". The table is labeled "58m" and "58n". The entire system is labeled "50".

FIG.31

S.T	Wait 1	Wait 2	Wait 3	Wait 4	Wait 5	Total
1. 1						1. 1
2. 2						2. 2
3. 3						3. 3

58a 58c 58e 58g 58i 58k 58l
 Edit Total Page up 5811
 58a1 58a2 58a3 58a4
 58m 58n

FIG. 32

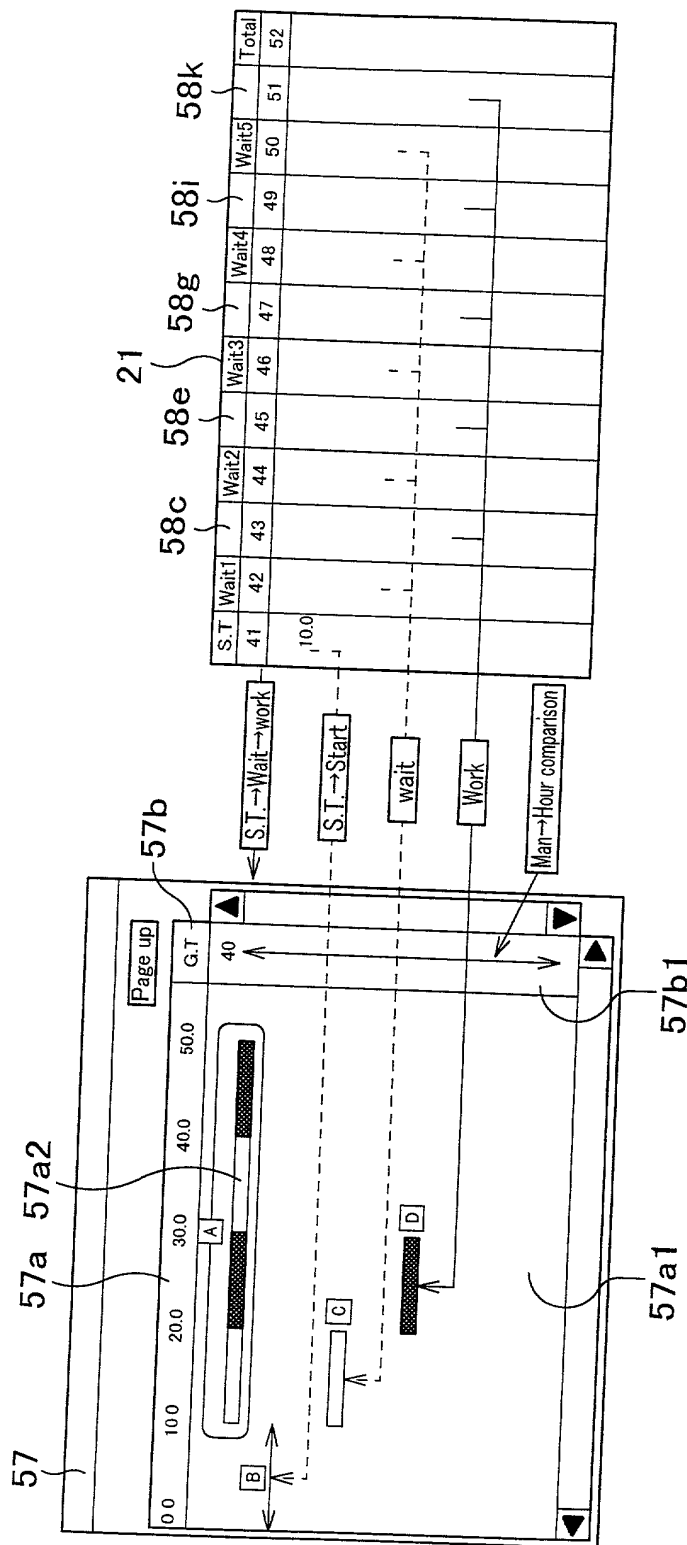


FIG. 33A

FIG. 33A

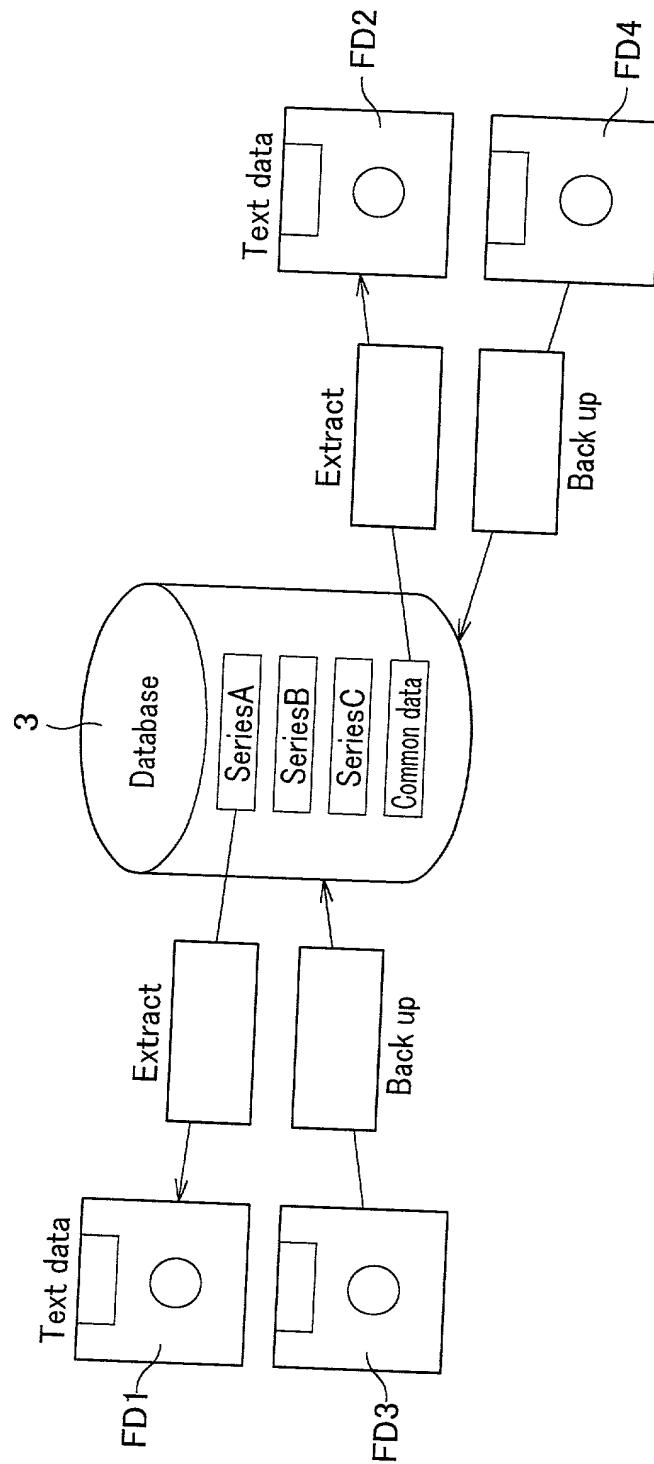


FIG. 33B

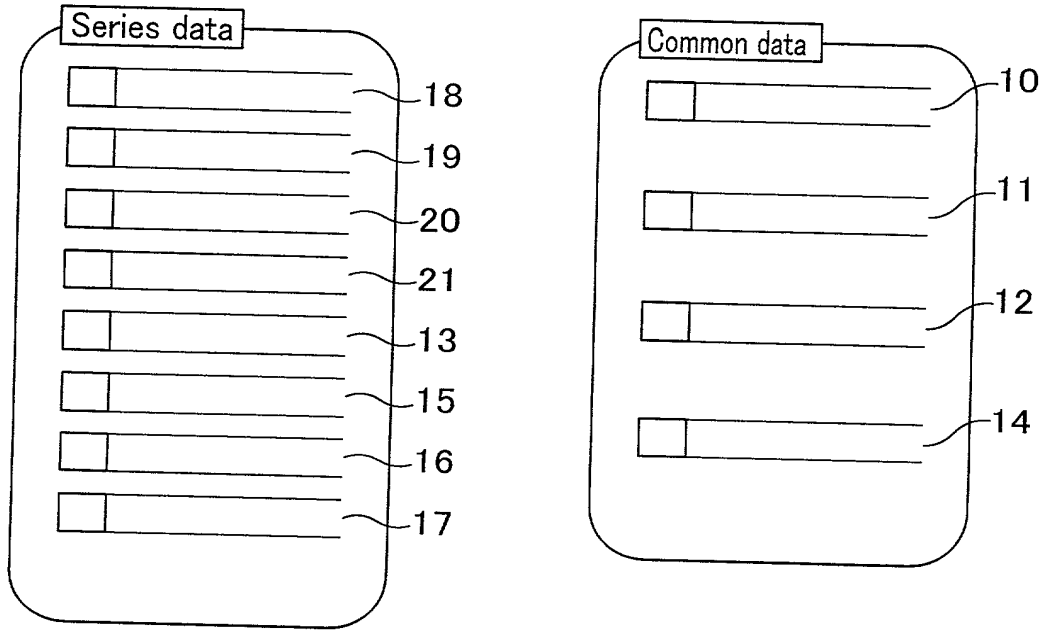


FIG. 34

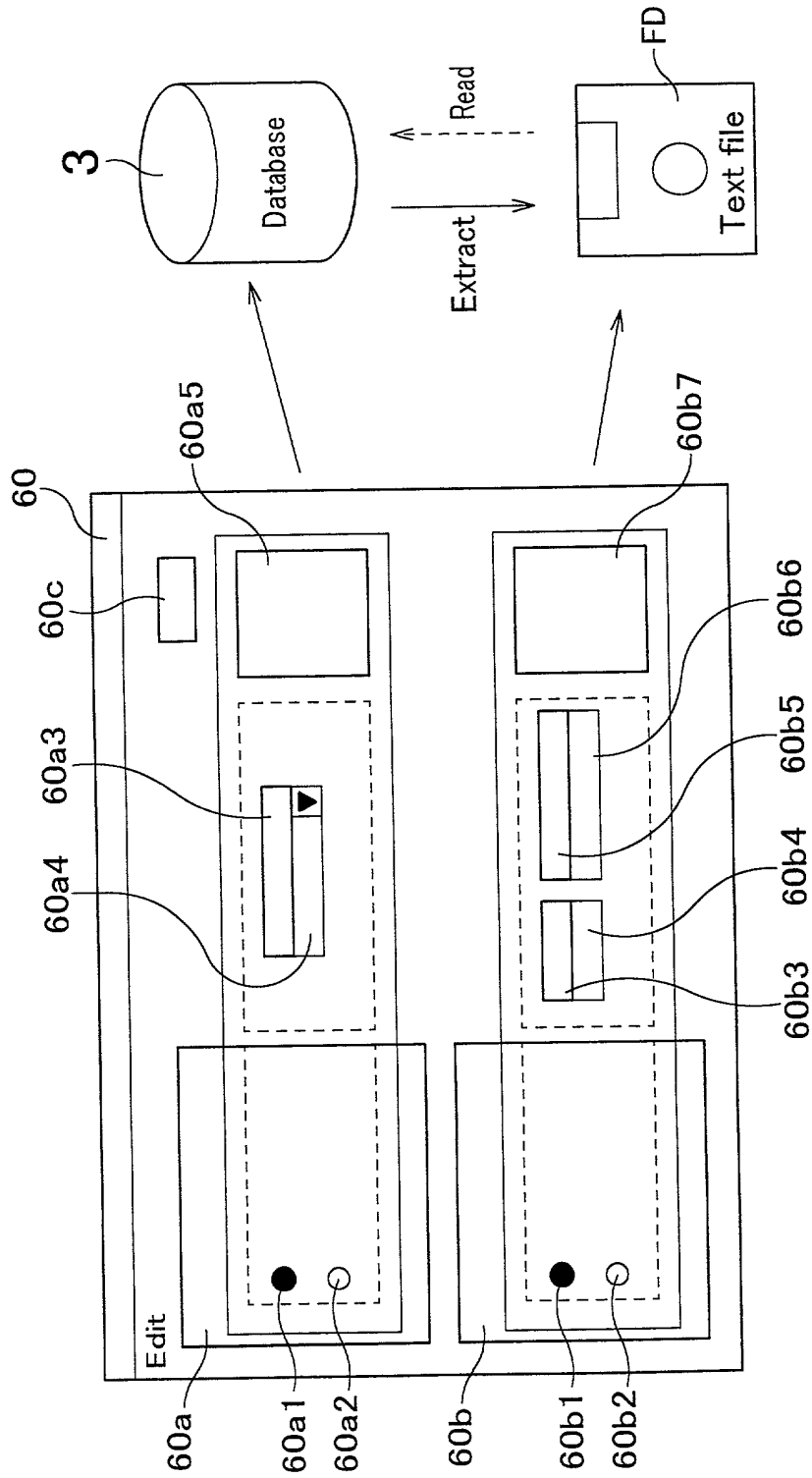
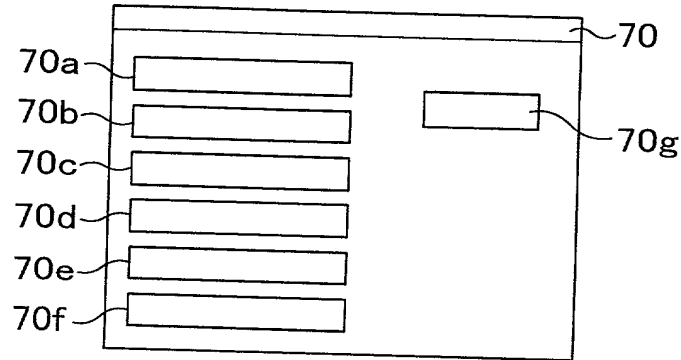


FIG. 35



03/24/2004

FIG. 36

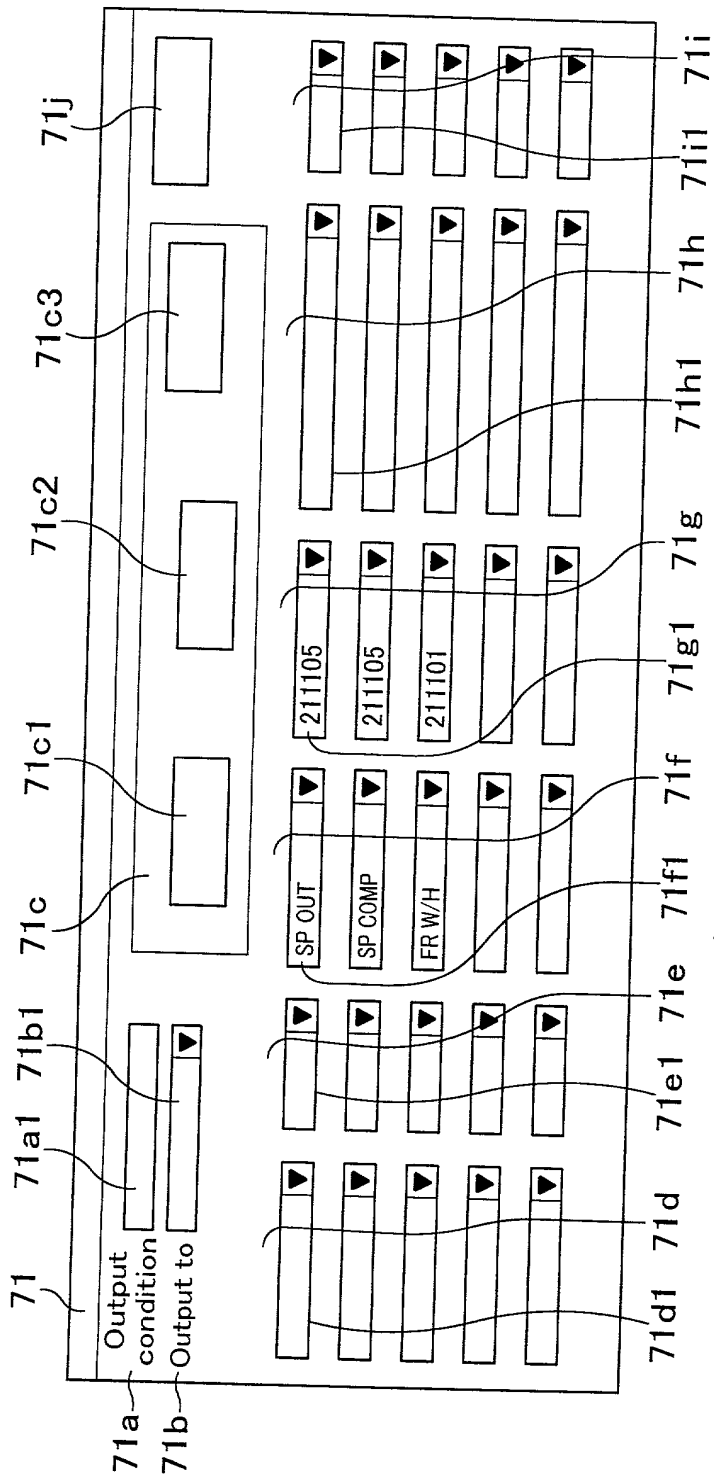


FIG. 37A

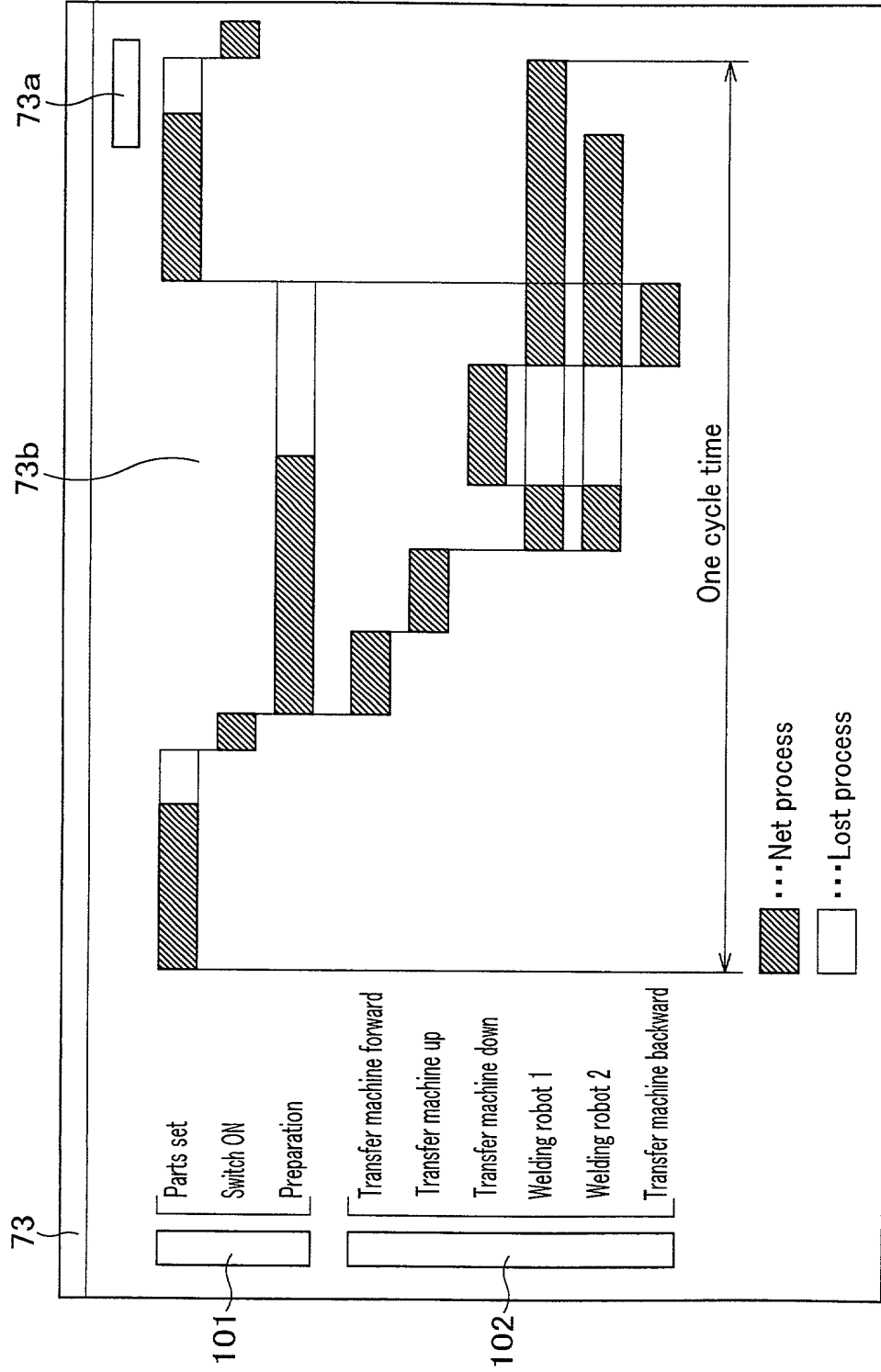
72 72a 72a1 72b1 72b 72d

Seriese	No condition				
Line NO.	No condition				
Line name	SP OUT	SP COMP	FR W/H		
Cost sensor	211105	211105	211101		
Process	No condition				
Derivalion	No condition				

1	FRW/H	211101	SET LH	1	Side frame		Off
2				2	Side frame		Out
3				3	Side frame		Turn
4				4	Side frame	T.T M/C	Set
5				5	Clamper		Push button
6				6	Dumper housing		Off
7				7	Dumper housing		Out

72c

FIG. 37B



74a	74b	74c	74d	74e	74f	74g	74h	74i	74j	74k	74	74l
1	S2H	N/R	1	FR W/H	211101	SET LH						
2						I.T	I.T gun	38.2				
3							SRM/C 1B	7.1	4			
4						1ST	SRM/C 1A	37.7	18			
5							SRM/C 2A	40.5	12			
6							SRM/C 3A	40.5	12			
7							SRM/C 1B	37.0	8			
8							SRM/C 2B	39.0	9			
9							SRM/C 3B	35.5	11			
10						2ST	SRM/C 1A	43.0	13			
11							SRM/C 2A	27.0	7			
12							SRM/C 3A	40.2	7			
13							SRM/C 1B	39.2	10			
								32.0	9			

75a 75b 75c 75d 75e 75f 75g 75h 75i 75j 75k 75l 75m 75n 75o 75p

75r1 75r1

FIG. 40

FIG. 40

76a	76b	76c	76d	76e	76f	76g	76h	76i	76j	76k	76l	76m	76n
1	S2H	N/R	1	FRW/H	211101	T.T	T.T gun	Set	4				
2							SRM/C 1B	Set	18				
3						1ST	SRM/C 1A	Set	12				
4							SRM/C 2A	Set	12				
5							SRM/C 3A	Set	8				
6							SRM/C 1B	Set	9				
7							SRM/C 2B	Set	11				
8							SRM/C 3B	Set	13				
9						2ST	SRM/C 1A	Set	7				
10							SRM/C 2A	Set	7				
11							SRM/C 3A	Set	10				
12							SRM/C 1B	Set	9				
13							SRM/C 2B	Set	14				
14							SRM/C 3B	Set	12				
15						Sub Total			146				
16													

	Class	Change No.	Date	Editor	Content	Changed	Series	Contract	LineNo	Line	No.
1	- E 1	S2HA-F-0001	1998/8/25	812563	Process reduction by spec change	-2.60	S2H	N/R	1	FR W/H	2 ▲
2											
3											
4											
5											
6											
7											

77c

FIG. 42A

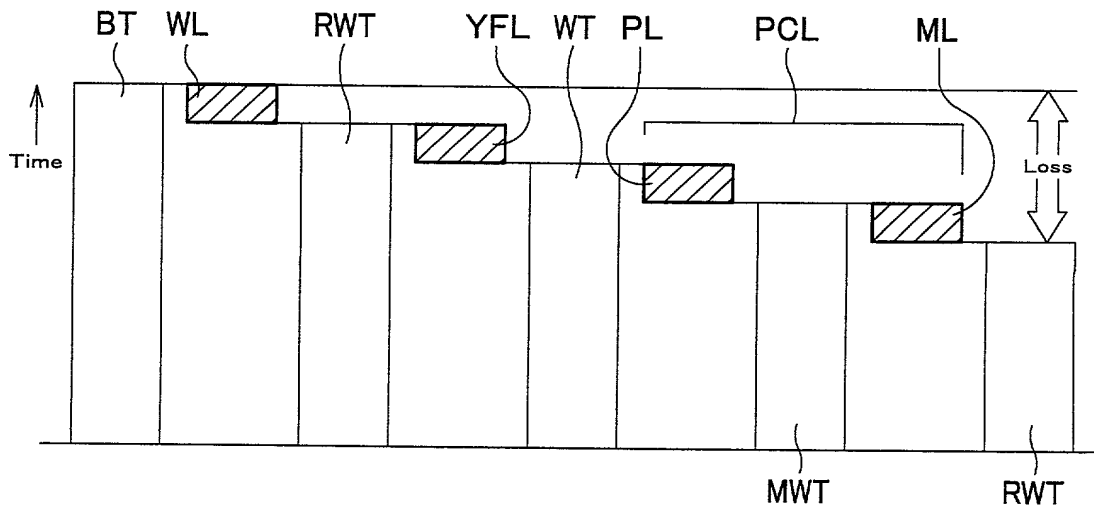


FIG. 42B

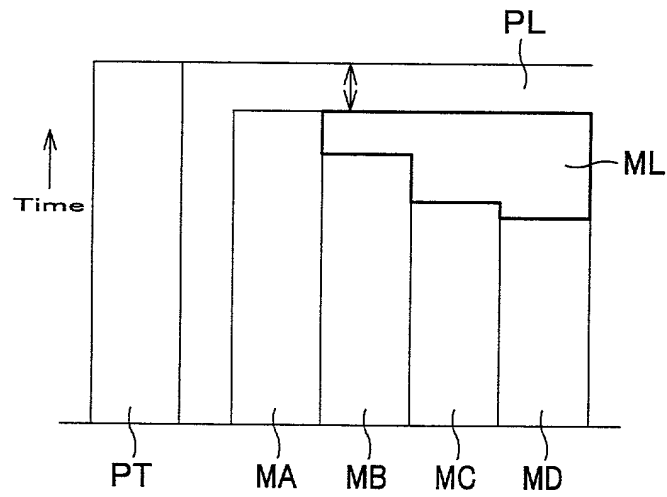


FIG. 43

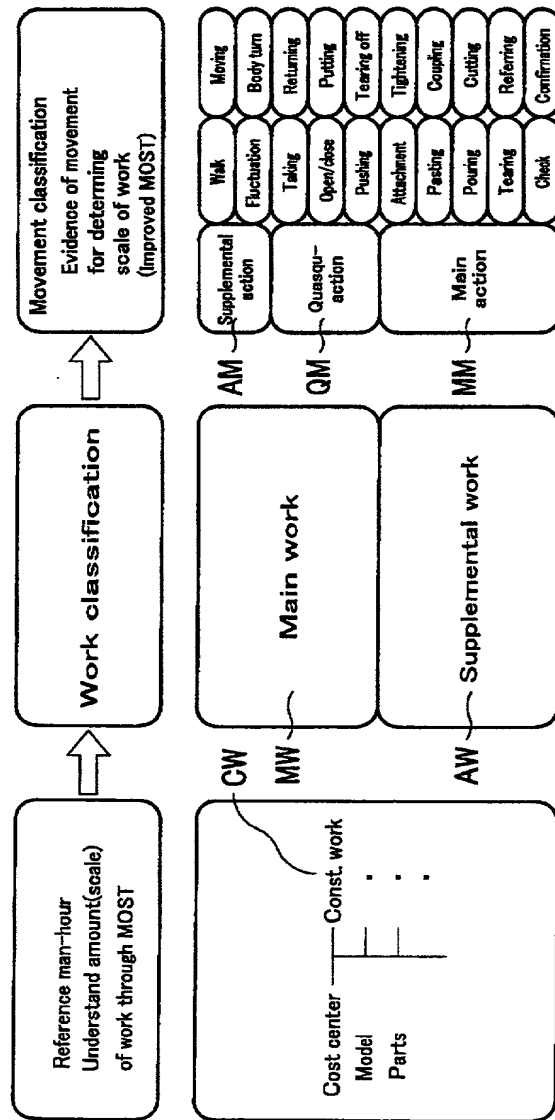


FIG. 44

